THE PROTECTIVE IMPACT OF RELIGIOSITY ON RISKY SEXUAL BEHAVIORS: THE CONFOUNDING ROLES OF SEX, AGE AND EXTRAVERSION TRAIT

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Abstract

Previous studies have demonstrated religiosity as a protective factor in risky sexual behaviors among adolescents and young adults. However, it is suggested in the present study, that the negative relationship established between religiosity and risky sexual behavior may be a spurious one considering the interconnectedness of gender, age and extraversion with these variables. In this regard, this study examined whether the negative relationship between religiosity and risky sexual behavior would exist or disappear after controlling the confound roles of sex, age and extraversion trait. Using the multi-stage sampling method, a sample of 252 undergraduates (Males = 130; Females = 122) o**f** Federal University Oye-Ekiti, Nigeria with a mean age of 20.79 years completed three validated self-report instruments measuring religious faith, perceived social support, personality and risky sexual behaviors. Data were analyzed using hierarchical multiple regression. Results indicated that gender [$\beta = .28$, $p < .0001$], age [$\beta = .16$, $p = .005$] and extroversion [$\beta = .15$, $p = .013$] predicted RSB [$F(5, 244) = 14.96$, $p < .0001$, $R^2 = .24$]. After controlling for gender, age and extraversion, increase in religious faith still predicted risky sexual behaviors [$\beta = -.23$, $p < .0001$]. This suggests that religious faith may actually serve as an aversion to engaging in risky sexual behaviors among adolescents and young adults. Therefore, interventions for premarital sex and risky sexual behaviors should be more intensified by religious organizations in order to prevent the spread of sexually transmitted infections, out of wedlock births and abortions.

Key words: Religiosity, Risky sexual behaviour, Age, Sex

INTRODUCTION

Abstinence is regarded as the best way of preventing the spread of sexually transmitted infections (STIs), unwanted pregnancies and abortions among adolescents/unmarried (Alo & Akinde, 2010). The principal antidote for pre-marital sex, STIs and out-of-wedlock births in the primitive era was abstinence. In 1900, evidence showed that the teenage period was devoid of pre-marital sex, and if it ever occurs, an insignificant rate of 6% was recorded (Greenwood & Guner, 2008). The Yoruba culture in the earliest times maintained a significant level of control on pre-marital sex in which rarely can one find teenagers and unmarried young adults that engage in sexual intercourse before marriage (Idoko, 2015; Fadipe, cited in Alaba, 2004). As a result of drastic social change- driven by education and technological evolution of contraception in modern times- there occur a dramatic shift to about 75% of teenagers involved in premarital sex by 2002, accompanied by significant rise in multiple sexual partners (Greenwood & Guner, 2008; Alaba, 2004). This current state of affairs was replicated in a local sample of 2,500 women from South-West Nigeria, where a prevalence of 84% was obtained for pre-marital sex before the age of 20 (Alo & Akinde, 2010).

The evolution of modern contraception necessitated diminished proscription of pre-marital sex by parents and the society because contraception increases the failure rate of becoming pregnant and contracting STIs (Fernández-Villaverde, Greenwood & Guner, 2010; Delcampo, Sporakowski & Delcampo, 2010). Since improvements in education and technology of contraception perhaps have up surged involvements in premarital sex with a significant reduction in risks associated with it (Udigwe, Adogu, Nwabueze, Adinma, Ubajaka & Onwasigwe, 2014), it is expected that teenagers and unmarried young adults would effectively utilize contraception and other safe sex practices to forestall the attendant consequences of engaging in premarital sexual relations.

However, the reverse seems to be the case. In spite of the exposure of adolescents and young adults to media messages on safe sexual behaviors and relative availability of contraception (at almost a free rate), there seems to be a continual rise in cases of unwanted pregnancies and contraction of STIs such as HIV/AIDS, gonorrhoeae and syphilis ("Ndeble," n.d.; Jaccard, 2009; Bachanas, Morris, Lewis-Gess, Sarett-Cuasay, Sirl, Reis & Sawyer, 2002). It has been reported that a considerable number of adolescents engage in risky sexual behavior characterized by unprotected sexual intercourse, having multiple sexual partners and use of psychoactive drugs to enhance sexual performance (Shore & Shunu, 2017; Ontieno, 2016; Famutimi & Oyetunde, 2014; Robinson, 1999 cited in Ekwueme, 2012). This may have

accounted for why adolescents and young adults (15-24 years) constitute 50% of individuals diagnosed with new STIs (Kagen, 2015). To this segment of the population, it is perhaps believed that engaging in sexual risk taking allows them to experience heightened euphoria in the sexual behavior process (Romero-Estudillo, González-Jiménez, Mesa-Franco & García-García, 2014).

Past studies have demonstrated the predicting factors of risky sexual behaviors. Among these are substance use, peer influence, pornography, perceived family control (Shore & Shunu, 2017; Nwankwo & Nwoke, 2009; Bachanas et al. 2002), emotional intelligence, religiosity, self-esteem, media (Ugoji, 2012; "Jaccard," n.d.), extraversion trait (Otieno, 2016). In the research literature, religiosity levels of young adults have also been found to be a protective factor to risky sexual behavior. Specifically, the more adolescents and young adults engaged in religious activities, there is a corresponding decrease in sexual intercourse and risks associated with it (Rostosky, Regenerus, & Wright, 2003; Miller & Gur; cited in "Jaccard," n.d.). However, this relationship may be a spurious one ("Jaccard," n.d.). Research has demonstrated that as adolescents get older, many reduce their participation in religious activities while at the same time becoming more involved in sex with its attendant risks, a condition which possibly may have nothing to do with drop in religiosity level ("Jaccard," n.d.). The established negative association between religiosity and risky sexual behavior, may partly or largely, be accounted for by the growing age of adolescents. Hence, unless age is controlled for in the relationship between religiosity and risky sexual behavior, we may not validly conclude that religiosity is a protective factor in risky sexual behavior among adolescents.

In similar manner, the influence of sex on risky sexual behavior may also account for the inverse relationship between religiosity and risky sexual behavior. Studies have demonstrated that male adolescents may be more prone to risky sexual behaviors than their female counterparts (Odimegwu & Somefun, 2017, Castillo-Arcos, Alvarez-Aguirre, Bañuelos-Barrera, Valle-Solís, Valdez-Montero, & Kantún-Marín 2017; Ogunleye, Omojola, Abikoye & Oke, 2015; Romero-Estudillo et al., 2014;). On the other hand, females have been generally found to be more involved in religious activities than males (Carapina, 2015; Schnabel, 2015; Henriques, 2014). With these, the level of the religiosity for the female sample will be inversely related with RSB (high religiosity/low RSB); while the same inverse pattern of relationship will be obtained for male sample (low religiosity/high RSB). Through this way, the negative relationship between religiosity and RSB may become spurious since the basis for the connection was probably gender. Again, there may need to

control for the influence of sex in the relationship between religiosity and RSB.

Apart from sex and age, personality characteristics may also account for the direction of relationship between religiosity and RSB. One personality trait that has consistently demonstrated a direct relationship with RSB is the extraversion trait. Several research outcomes have shown that adolescent/young adults with greater composition of extraversion tend to get more involved in risky sexual behaviors (Morales, 2017; Otieno, 2016; Durvasula & Reagan, 2015; McGhee, Ehrler & Buckhaltt, 2012). However, some studies have demonstrated a relationship between extraversion trait and religiosity. In particular, it is documented that individuals low on the extraversion trait are more religious than those with high extraversion; thus making extraversion an aversion to religiosity (Sontakke, 2017; Mousavimoghadam, 2015; Hills, Francis, Argyle & Jackson, 2004). By these interconnections, the negative relationship between religiosity and RSB becomes questionable since individuals high on extraversion will be low on religiosity and thus, predisposing high RSB. Hence, it is also important to control for the influence of extraversion trait when examining the relationship between religiosity and risky sexual behavior.

From the foregoing, the objective of this study centers on examining whether or not the protective influence of religiosity on risky sexual behavior is confounded by sex, age and extraversion trait. The outcome of this work will enhance a clearer understanding of the part played by sex, age and extraversion trait in the inverse relationship between religiosity and risky sexual behaviors. It will also help us make certain our knowledge of the protective impact of religiosity on risky sexual behavior after controlling for sex, age and extraversion trait.

METHOD

Sample and procedure

Adopting the ex-post-facto research design, two hundred and fifty two, first and second year undergraduates (130 males, 122 females) of Federal University Oye-Ekiti, Ekiti State, Nigeria were selected by means of the multi-stage sampling method to participate in the study. Ages ranged from 17-28 years; 51% of participants were below 21 years, 49% were above 20 years of age while the mean age was 21 years (SD = 2.5).

Before commencement of scale administration, study procedures were approved by the headship of Department of Psychology, Federal University of Oye-Ekiti. At the administration of research instruments, informed consent of participants was obtained and confidentiality of responses was assured. Scales were administered to students during

free periods in the classrooms and retrieval of completed research instruments was done immediately.

Measures

Risky Sexual Behavior Scale (RSBS): The RSBS consists of 8-items designed by Oliver & Sweeney (2006) to measure facets of sexual risk taking behaviours that endanger individuals to contracting STIs. Critical risk taking behaviors assessed by the RSBS include number of sexual partners, number of one-night stands, regret of casual one-time encounter, unprotected sex with casual partners, number of multiple sexual partners at a time, unfaithfulness to regular partners, frequency in the use of condoms with regular and casual partners. Sample items include "In the last twelve months, approximately how many sexual partners have you had?" "In the last twelve months, have you had unprotected sex with a casual or one time partner?" e.t.c. Items 1 and 2 of the RSBS are scored on a response format ranging from (0-15), where response of 0 = 0; 1 = 1; 2- 4 = 2; 5-9 = 3; 10-14 = 4; ≥15 = 5. Items 3-6 are scored on a "Yes" (1) or "No" (0) format while items 7 and 8 are scored on a Likert format ranging from Never (4) to Always (0). Individual scores on each item are summed to obtain a total score for RSBs. High scores reflect increased sexual risk taking behaviors. The RSBS has been found to be a reliable measure of assessing sexual risk taking behaviors in local sample (Ogunleye et al., 2015).

The Santa Clara Strength of Religious Faith Questionnaire (SCSRFQ): The SCSRFQ is a 10- \item self-report instrument developed by Plante & Boccaccini (1997 a, b) to assess level of religiosity and its potency in individual lives. The SCSRFQ measures religious faith regardless of one's religious affiliation or denomination within both clinical and non clinical populations on a 4-point Likert response format, ranging from (1) Strongly disagree to (4) Strongly agree. SCSRFQ sample items include "I pray daily," "I look to my faith as a source of inspiration," "My relationship with God is extremely important to me" e.t.c. The authors provided a Cronbach alpha coefficient ranging between .94 and .97 for the SCSRFQ (Plante & Boccaccini, 1997 a, b) while the present study obtained an internal consistency coefficient of .83. The scale has also been found to be a valid measure of religiosity (Plante and Boccaccini (1997a; Plante, Yancey, Sherman, Guertin, and Partdini, 1999). High scores on the scale denote high level of religious faith.

Big Five Inventory-10 (BFI-10): The BFI-10 is a ten-item scale designed to measure five different personality dimensions (Rammstedt & John, 2007). The personality dimensions measured are extraversion *(sociable vs reserve), agreeableness (trusting vs suspicious), conscientiousness (organized vs disorganized; competent vs incompetent), neuroticism (anxious vs calm) and openness to experience (prefers*

variety vs prefers routine) (Costa & McCrae, 1985). The scale was derived from the 44 test items of the Big Five Inventory (BFI) (John & Srivastava, 1999). To demonstrate how the BFI-10 represent the full scale (BFI-44), part-whole correlations of the short scales with the full scales was computed using three large samples and the overall mean correlation was .83 **(**Rammstedt & John, 2007).

A test- retest reliability procedure which spanned between 6-8weeks gave rise to an average .75 for the different BFI dimensions. The convergent validity correlations with the NEO-PI-R (Costa & McCrae, 1992) domain scales averaged .67 across Big Five domains **(**Rammstedt & John, 2007). Olawa (2016) examined the five-factor model of the BFI-10 using confirmatory factor analysis. The fit indices showed that the five factor model was an acceptable explanation of the sample data ($\chi^2_{(25)} = 57.85$, $p < .0001$; GFI = .98; RMSEA = .05, SRMR = .04)

The BF1-10 is scored on a 5 point likert scale format ranging from disagree strongly (1) to agree strongly. On the scale the item number of each domain of the BFI-10 is presented below:Extraversion: 1R, 6; Agreeableness: 2, 7R; Conscientiousness: 3R, 8; Neuroticism: 4R, 9 Openness: 5R, 10. (R = item is reversed-scored).

Data analysis

Frequencies and cross tabulations gave the prevalence of risky sexual behaviors. Bivariate analysis was used to establish relationship among study variables. Hierarchical multiple regression was used to investigate the predictive ability of religiosity on risky sexual while controlling for sex, age and personality traits.

Results

Table 1 gives the frequencies for risky sexual behavior by gender and for total sample. 46% of participants reported that they have sexual partners out of which 26% had one sexual partner, 17% had up to four sexual partners while 3% had up to nine sexual partners. Among males, 32% had more than one sexual partner as compared with females where only 7% had more than one sexual partner. Only about 20% of those sexually active have had one-night stand; however, one-night stand appears to be more common among males (32%) than females (7%). Involvement in unprotected sex with casual partners seems frequent as 48% of sexually active participants have engaged in unprotected sexual intercourse, and this is quite common to both males (57%) and females (39%). Twenty six percent (26%) among the sexually active participants reported that they have had multiple sexual partners concurrently; however males (30%) engage in this twice as females (17%). Up to 38% of sexually active participants have been unfaithful (i.e. shown infidelity) to their regular sexual partners; again more common among males (48%) than females (22%). As regards the

frequency of condom use with regular sexual partners, 28% reported that they use condom always, 35% did not use condom at all while 37% were inconsistent with condom use. For casual partners, only 15% reported that they use condom always, 50% never used condom while 34% did not use condom regularly.

Table 1: Frequencies of risky sexual behaviors by gender and for total sample

risky sexual behaviors	**n (%)**	**n (%)**	**N (%)**
	Male n = 130 (52)	Female n = 122 (48)	Total N = 252
Number of sexual partners			
None	54 (42)	81 (66)	135 (54)
One	34 (26)	32 (26)	66 (26)
Up to four	35 (27)	8 (6)	43 (17)
Up to nine	7 (5)	1 (1)	8 (3)
Number of one-night stands			
None	89 (69)	114 (93)	203 (81)
1	17 (13)	3 (3)	20 (8)
Up to 4	20 (16)	5 (4)	25 (10)
Up to 9	4 (3)	0 (0)	4
Regretted casual one-time encounters			
No	48 (63)	30 (73)	78 (67)
Yes	28 (37)	11 (27)	39 (33)
Sexual relation with casual partner			
Protected	36 (47)	25 (61)	61 (52)
Unprotected	40 (57)	16 (39)	56 (48)
Having multiple sexual partners at the same time			
No	53 (70)	34 (83)	87 (74)
Yes	23 (30)	7 (17)	30 (26)
Fidelity regular sexual partner			
Faithful	40 (53)	32 (78)	72 (62)
Unfaithful	36 (48)	9 (22)	45 (38)
Frequency condom use with regular partner			
Never	31 (41)	10 (24)	41 (35)
Sometimes	9 (12)	4 (10)	13 (11)
Often	6 (8)	1 (2)	7 (6)
Almost always	17 (22)	6 (15)	23 (20)
Always	13 (17)	20 (49)	33 (28)
Frequency of condom use with casual partner			
Never	41 (54)	18 (44)	59 (50)
Sometimes	6 (8)	5 (12)	11 (9)
Often	6 (8)	1 (2)	7 (6)
Almost always	14 (18)	8 (20)	22 (19)
Always	9 (12)	9 (22)	18 (15)

Table 2 gives the mean, standard deviation scores and correlation coefficients among study variables. The male sex was more associated with risky sexual behavior (r_{pb}= .33, p < .0001). Risky sexual behaviors was significantly and positively correlated with age (r = .24, p < .0001) and extraversion trait (r = .18, p = .004), but negatively correlated with religious faith (r = -.28, p < .0001) and agreeableness trait (r = -.15, p = .015).

Table 2: Mean, standard deviation scores and correlations among study variable

Variables N = 252	M (SD)	1	2	3	4	5	6	7	8
1. Risky sexual behavior	4.27 (5.60)	-							
2. Sex	-	.33**	-						
3. Age	20.79 (2.48)	.24**	.24**	-					
4. Religious faith	35.30 (3.86)	-.28**	-.05	-.01	-				
5. Extraversion	4.60 (1.38)	.18**	.03	.02	-.16**	-			
6. Agreeableness	6.07 (1.22)	-.15*	.01	-.05	.01	-.16*	-		
7. Conscientiousness	5.76 (1.26)	.04	.15	.19	.19**	-.02	.11	-	
8. Neuroticism	4.88 (1.26)	.01	-.07	-.09	-.04	-.02	-.11	-.14*	-
9. Openness	5.77 (1.06)	.02	.06	-.05	-.01	-.08	.20**	.11	-.06

*$p < 0.05$ (2-tailed) **$p < 0.001$ (2-tailed)
Sex = Male (1), Female (0)

Religious faith and extraversion were significantly and negatively related (r = -.16, p = .009). However, risky sexual behaviors were not significantly related with conscientiousness (r = .04, p = .58), neuroticism (r = .01, p = .89) and openness to experience (r = .02, p = .71). Contrary to expectation, age (r = -.01, p = .83) and sex (r_{pb}= -.05, p = *.48*) were not significantly related to religiosity.

Table 3: Hierarchical multiple regression for risky sexual behavior

	R	R^2	ΔR^2	F	β	t
Step 1	.36	.13	-	18.53***		
Sex					.28***	4.60
Age					.17**	2.81
Step 2	.42	.18	.05	13.02***		
Sex					.28***	4.64
Age					.16**	2.71
Extraversion					.15*	2.51
Agreeableness					-.13*	-2.23
Step 3	.48	.24	.06	14.96***		
Sex					.27***	4.68
Age					.16**	2.81
Extraversion					.11	1.87
Agreeableness					-.13*	-2.30
Religious faith					-.25***	-4.35

*p < .05; **p < .01; ***p < .001

to experience (r = .02, *p* = .71). Contrary to expectation, age (r = -.01, *p* = .83) and sex (r_{pb}= -.05, *p = .48*) were not significantly related to religiosity.

Table 3 presents the hierarchical multiple regression for risky sexual behavior. In the first step of hierarchical multiple regression, two predictors were entered: sex and age. This model was statistically significant F (2, 247) = 18.53; p < .0001 and explained 13% of variance in risky sexual behavior. Independently, sex [β= .28, p < .0001] and age [β= .17, p = .005] made a significant unique contribution to the model. After entry of extraversion and agreeableness traits at Step 2 the total variance explained by the model as a whole was 18% (F (4, 245) = 13.02; p < .0001). Independently, extraversion [β= .15, p = .013] agreeableness [β= -.13, p = .027] also predicted risky sexual behavior. The introduction of extraversion and agreeableness explained additional 5% of variance in risky sexual behavior, after controlling for sex and age (R^2 Change = .05; F (2, 245) = 6.66; p = .002). The entry of religious faith in the final step gave a total variance of 24% (F (5, 244) = 14.96; β= -.25, p < .0001). The introduction of religious faith explained additional 6% of variance in risky sexual behavior, after controlling for sex, age, extraversion and agreeableness (R^2 Change = .06; F (1, 244) = 6.66; p < .0001). In the final adjusted model, four out of five predictor variables were statistically significant, with sex recording the highest Beta value (β = .27, p < .0001) followed by religious faith (β = -.25, p < .0001), age (β = .16, p = .005) and agreeableness (β = -.13, p = .022), with extraversion (β = -.11, p = .062) becoming an insignificant predictor of risky sexual behavior.

DISCUSSIONS

This study assessed whether the negative relationship between religiosity and risky sexual behaviors was a spurious one considering the interconnections of sex, age and extraversion trait. In addition, the prevalence of risky sexual behaviors in study sample for both males and females were reported. As in earlier studies (Ugoji, 2012; "Jaccard," n.d.), an inverse relationship was found between religiosity and risky sexual behaviors. This confirms previous findings that demonstrated a strong belief in God and adherence to religious laws and precepts may serve as deterrent to engaging in premarital sexual relations and risky sexual behaviors. Apart from religiosity, this study also found that sex, age, extraversion and agreeableness traits were also predictive factors of risky sexual behaviors among adolescents and young adults. Specifically, the male sex was more associated with engaging in risk sexual behaviors. Higher prevalence was found for males than females in all the 8 dimensions of risky sexual behaviors, in which differences were more reflected in having multiple sexual partners and one-night stands. These differences may be explained by the expectation of the society

in expression of sexual urges and impulses for both males and females. While our society frown less at sexual promiscuity in males (through its formalization in polygyny), females are usually condemned, labeled and stigmatized for indiscriminate sexual behavior (Kreager & Staff, 2009). Alternatively, the difference in libido levels for the two sexes may also account for variation in risky sexual behaviors, for males have been found to possess higher libido than females (Beutel, StobelRichter, & Brahler, 2007; Peplau, 2003). However, in spite of the significant influence of sex on risky sexual behaviors, it did not suppress the relationship between religiosity and risky sexual behavior after being controlled in the regression model.

Corroborating previous studies (Rostosky, Regenerus, & Wright, 2003; "Jaccard," n.d.), present findings suggest a positive association between age and risky sexual behaviors. This shows that adolescents tend to increase sexual behaviors as they grow older. The positive relationship between age and sexual risky behavior confirms the fact that the period of transition from adolescence to young adulthood is characterized by intense sexual impulse, fantasies and experimentation (Romer, 2010). Consequently at this period, young adults keep multiple sexual partners concurrently; fail to abstain from sexual intercourse, infrequently use condoms and other contraceptives. Like sex, age was not a confounding factor in the inverse relationship between religiosity and risky sexual behaviors.

The positive association of the extraversion trait with risky sexual behavior was also confirmed. Similar to past studies, individuals with high composition of extraversion trait seem to involve more in sexual risk taking than introverts. This further confirms the notion that extroverts are high sensation seekers and explorers of the environment than introverts (Bennington-Castro, 2013). Thus, to "enjoy" sex better, extroverts probably seek more one night stands, keep multiple sexual partners concurrently and take greater risk by jettisoning the use of condoms and other contraceptives. Result also confirmed previous outcomes (Morales, 2017; Otieno, 2016) that demonstrated negative relationship between extraversion and religiosity. Although intuitively, being religious may enable extroverts to meet one of his/her social needs, however, religiosity also demands one to be reclusive, meditative and reflective in order to have personal times with God, thus limiting opportunity for socials. As a result, being religious may not be out rightly interesting to extroverts. Nevertheless, the control of the influence of extraversion did not suppress the negative relationship between religiosity and risky sexual behaviors. Instead, at the introduction of religiosity into the regression model, the earlier influence of extraversion on risky sexual behavior became non significant. This

suggests that religiosity may be a protective factor in the influence of extraversion trait on risky sexual behaviors.

Conclusion

This study confirmed that the protective impact of religiosity on risky sexual behavior was not confounded by sex, age and extraversion. Although, sex, age and extraversion trait significantly predicted risky sexual behavior; nonetheless, their influences were not overarching to make the negative relationship between religiosity and risky sexual behavior disappear. The implication of this finding is that, the protective influence of religiosity on risky sexual behavior may not be spurious in nature. This suggests that, living a religious life may help young adults avoid sexual risk taking and abstain from premarital sexual relations. Therefore, interventions for premarital sex and risky sexual behaviors should be more intensified by religious organizations in order to prevent the spread of sexually transmitted infections, out of wedlock births and abortions. Considering that the sample size of the present study is not robust enough to extend findings to the general population of adolescents and young adults, potential studies in this area may replicate this research in larger sample to further examine the confounding roles of sex, age and extraversion trait in the relationship between religiosity and risky sexual behaviors. Future studies can also investigate the moderate role of religiosity in the risk impacts of sex, age and extraversion trait on risky sexual behaviors.

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SOCIAL SUPPORT, HOPE AND HAPPINESS AS PREDICTORS OF QUALITY OF LIFE AMONG HEALTH WORKERS IN MAKURDI METROPOLIS

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Abstract
This study examined social support, hope and happiness as predictors of quality of life among health workers in Makurdi metropolis. 171 participants consisting of 67 (39.2%) males and 104 (60.8%) females were drawn through purposive sampling method. The Multidimensional Scale of Perceived Social Support, Adult Trait Hope Scale, Orientations to Happiness Scale and World Health Organization Quality of Life Scale were used to collect data from the participants. Data were analyzed using Hierarchical Multiple Regression. Findings from the hypotheses indicated that, social support, hope and happiness independently and jointly predicted quality of life among Health workers in Makurdi metropolis. Therefore, it was recommended that, conscious efforts be made towards enhancing such aspects as, social support, hope and happiness as they affect health workers quality of life in Makurdi metropolis in particular, and Nigeria at large.'

Key words: Social Support, Hope, Happiness, Quality of Life, Health Workers.

INTRODUCTION

Interest in social support, hope, happiness and quality of life among health workers has accelerated in recent years. Part of the reasons for this renewed interest has been that, social support, hope and happiness are found to have predicted quality of life among civil servants (Malinauskas, 2010; McCullough & Snyder, 2000). In recent times, organizations have high awareness about the importance of employees' commitment as one of the forces that could influence its development. To maintain employees' commitment, organizations should give more attention to enhance their quality of life. But sometimes, organizations have several difficulties in creating appropriate programs to fulfill employee's needs of quality of life. Variables such as occupational stress, burnout, communication, flexible work arrangement, employee motivation, fatigue, social support hope, happiness, perceived organization safety and support may influence an individual's quality of life. However, the present study examined only three of these factors; social support, hope and happiness to see their effect on quality of life.

Social support is the comfort given to us by our families, friends, coworkers and others (Onyishi, Okongwu & Ugwu, 2012). This comfort can be in the form of resources provided by others to assist us. Perceived social support can be instrumental, tangible, informational and emotional. Social support for employed youths is conceptualized as coming from three sources including family, friends and significant others (Edwards, 2004; Onyishi *et. al.,* 2012). These sources of support could help an individual cope with varying life challenges. Most people turn to social resources in an effort to contain stressful events in life (Malinauskas, 2010). In this case, support network is an indication of social integration and the more one is integrated, the more one can cope with the effects of work and family life. Social support has been linked with quality of life (Heady & Wearing, 1992; Young, 2004). Increase in social support has been associated with increase in overall quality of life (Newson & Schulz, 1996). Friends and family support significantly predict quality of life (Au, Lau, Koo, Cheung, Pan, & Wong, 2009; Yeung & Fung, 2007). The employee's quality of life might be compensated or at least improved upon if workers are given social support (Lorenzini & Guigini, 2010). The help of the family in supporting workers might prove essential. Similarly, being in a relationship with a partner and having close friends with whom one can talk to might help in overcoming the psychological and physical distress caused by work. More generally, one may think of social support of all kinds to be crucial to help workers cope with the demand of work and family.

Another variable of interest in this study is hope. Hope is the perceived capacity to

derive pathways to desired goals and motivate oneself through agency thinking to use those pathways (Snyder, 2002). It is the overall perception that one's goals can be met. Hope has three necessary ingredients: Goal-oriented thoughts, Pathways to achievement of goals and agency thoughts directed to goal achievement (Snyder, 2002). Hope is a motivational concept but clearly has a cognitive component. Hence, including this part of hope, hope is "a reciprocally derived sense of successful agency (goal directed determination) and pathways (planning of ways to meet the goals)" (Snyder, Cheavens & Michael, 1999). Hope may be associated with higher quality of life, use of adaptive coping methods, flexible and positive thoughts, (McCullough & Synder, 2000; Snyder *et al.,* 1996), and more positive appraisals of stressful events (Affleck & Tennen, 1996). Hope has been taken as an individual difference factor that colors one's appraisal of stressors and the coping process (Snyder *et al.,* 1991). Thus, individuals high in hope would appraise stressors as more challenging (as opposed to more threatening), and thus have the ability and motivation to improve quality of life and to find solutions to ameliorate the stressful feelings and resolve the stressor as a function of this orientation (Lazarus & Folkman1984; Thompson, Gustafson, Hamlett, & Spock, 1992).

Beside social support and hope, happiness is another psychological variable that has been implicated in the prediction of quality of life. Being happy is of great importance to most people, and happiness is a highly valued goal in most societies ((Diener, 2000). Happiness in the form of joy appears in every typology of "basic" human emotions. Feeling happy is fundamental to human experience, and most people are at least mildly happy much of the time (Diener & Dienner, 1996). Philosophers and social researchers have defined happiness in a variety of ways (Kesebir & Diener, 2008). The largest divide is between hedonic views of happiness as pleasant feelings and favorable judgments versus eudemonic views of happiness involving doing what is virtuous, morally right, true to oneself, meaningful and/or growth producing (Ryan & Desi, 2001; Ryff & Singer, 2008). The successful pursuit of happiness is vital to our quality of life. All of us want to lead meaningful and fulfilling lives, want to enhance our experiences of love and relationship. Happiness is commonly defined as a state of well-being, it is commonly associated with feeling good or experiencing pleasures. It is an emotional or affective state that is characterized by feelings of enjoyment and satisfaction. As a state and a subject, it has been pursued and commented on excessively throughout world history. This reflects universal importance that humans place on happiness which leads to quality of life.

Social Support and Quality of Life

Balogun (2014) explores the extent to

which the big five personality traits (extraversion, neuroticism, agreeableness, conscientiousness, openness, openness to experience), emotional intelligence and social support predict quality of life among less explored sample such as prison inmates in Nigeria. The study also investigated whether perceived social support predict quality of life beyond and above dispositional factors after demographic variables such as age, gender and religion were controlled. 251 inmates were randomly selected from 3 prisons in three South-Western States in Nigeria to participate in the study. Data were collected using Quality of Life Questionnaire, Big Five Personality Inventory, Self-report Emotional Intelligence Test and Multidimensional Scale of Perceived Social Support, and were analyzed using hierarchical multiple regression analysis. Results showed that extraversion, neuroticism, agreeableness, conscientiousness, openness, emotional intelligence and perceived social support collectively and relatively contributed to prison inmate's level of quality of life. Moreover, social support predicted quality of life above and beyond big five personality traits and emotional intelligence. The results were discussed in line with past findings. Practical implications of the findings were also highlighted.

Farzaee (2012) examined the relationship between quality of life, self-esteem and perceived social support in high school students. 150 eight grade girls were selected among the entire population of 2008-2009 students in the city of Tehran using multi stage cluster method. Quality of life, Coopers-Smith Self-Esteem and Wax Social Support Questionnaire were used to obtain data. The result of the analysis of data that was done in two levels of descriptive (mean, standard deviation, correlation coefficient) and deductive (multi parameters regression) shows that a positive meaningful relation exists between self-esteem and quality of life at less than 0.001 level. A positive meaningful relation at less than 0.01 level exist between self-esteem and small scale as well as the number of total social support. Furthermore, the linear regression equation showed that to predict quality of life, self-esteem and social support (in family scale) are important in the same order.

Similarly, Gore (1978); Pearlin, Menaghan, Morton and Mulan (1981); Thoits (1995) have shown that social support is beneficial to health and quality of life while facing stressful events, although they cannot prevent all damaging effects. In another study, Adedimeji, Alawode and Odutolu (2010) examined the impact of social support, economic, psychological and environmental factors on health and quality of life among people living with HIV/AIDS in Southwest Nigeria. Using participatory methodology, 50 HIV positive people, 8 health personnel and 32 care providers were

interviewed to explore how care and support affect happiness in view of constraints to accessing antiretroviral drugs. Analysis of data used the grounded theory (GT) approach to identify themes, which are considered crucial to the well-being of people living with HIV/AIDS. The findings highlight several factors, apart from antiretroviral drugs, that impact the happiness of people living with HIV/AIDS in Southwest Nigeria. These include concerns about deteriorating physical health, family and children's welfare, pervasive stigma, financial pressures and systematic failures relating to care among others. They further described how psychological and social support structures can considerably contribute to improving health outcomes among them because of how they affect the functioning of the immune system, self-care activities and other illness behaviors.

In another study, Calvete and Connor-Smith (2006) found support in family and friends to increase quality of life among students. This finding as supported by Dollete Steese, Phillips and Matthews (2004) found that social support act as a protective factor could decrease psychological problems among students such as stress, thus, increasing quality of life. A study by Wentzel (1998) found that social support positively influence students' quality of life and performance. This study is supported by the study by Quoman and Greenberg (1994) who found that less social support from these sources would lead to poor quality of life and failure. And in a meta-analysis of subjective well-being correlates, Pinquart and Sorensen (2000) found that life satisfaction, self-esteem and quality of life showed a stronger relationship with ratings of social contact quality than with social contact quantity (i.e. social embededness).

In another study, Savelkoul, Post, de Witte and van den Borne (1999) conducted a cross-sectional study to examine the relationship between social support, coping and happiness by testing three hypotheses: social support influences quality of life through coping; there is a reciprocal relationship between social support and coping; and both concepts influence quality of life. Data were analyzed from 628 patients with one or more chronic rheumatic disorder(s) affecting the joints, in some patients combined with another rheumatic disease (no fibromyalgia). Although causal inferences are not possible, the results present a plausible causal sequence in supporting the second hypothesis. This is only true, however, for coping by awaiting/avoidance, coping by awaiting/avoidance led to less social support and this decrease in social support negatively influenced quality of life.

In their study, Siedlecki, Salthouse, Oishi and Jeswani (2013) examined the relationship between social support and quality of life across age. The relationships

among types of social support and different facets of quality of life (i.e. positive affect and negative affect) were examined by the authors in a sample of 1,111 individuals between the ages of 18 and 95 years. Using structural equation modeling, they found that the quality of life was predicted by enacted and perceived support, positive affect was predicted by family embeddedness and provided support. When personality variables were included in a subsequent model, the influence of the social support variables were included in a subsequent model, the influence of social support variables were generally reduced. Invariance analyses conducted across age groups indicated that there were no substantial differences in predictors of the different types of subjective quality of life across age.

Walen and Lachman (2000) conducted a study to examine the association between social support and quality of life, investigate whether these associations depend on relationship type (partner, family, friend), examine the buffering effects of support on strain (both within and across relationship type), and test the extent to which these associations differed by age and sex. The sample consisted of 2,348 adults (55%0 aged 25 to 75 ears (M=46.3), who were married or cohabiting. Positive and negative social exchanges were more strongly related to happiness than to health. For both sexes, partner support, strain and family support were predictors of quality of life measures; partner strain was also predictive of health problems. However, family strain was predictive of quality of life and health outcomes more often for women. They therefore concluded that, supportive networks could buffer the detrimental effects of strained interactions, then friends and family served a buffering role more often for women than for men.

Hope and Quality of Life

Hasnian, Wazid and Hasan (2014) conducted a study to ascertain the contribution of optimism, hope and quality of well-being on quality of life of young adult Assamese males and females. It also investigated the difference between young adult Assamese males and females on quality of life, optimism, hope and psychological well-being. A sample of 100 young graduate adults, 50 males and 50 females residing in the Kamrup district of the state of Assam was taken. Ryff scales of Psychological Well-being, Life Orientation Test of Scheiser and Carver for optimism, Adult Trait Hope Scale of Snyder and Quality of Life Questionnaire were used. Separate regression analyses were run to find out the percentage of variance contributed by optimism, hope and psychological well-being on quality of life of males and females. In order to find the difference between the means of variance Assamese males and females on different variables, t-test was applied. Significant combined contribution of variance of optimism, hope and psychological well-

being on happiness of young adult Assamese males and females were obtained. However, only hope in males and psychological well-being in females individually contributed 63% and 53% significant variance respectively to their quality of life. Significant difference between young adult Assamese males and females on psychological well-being and quality of life were obtained, whereas females were found to be higher on well-being and males on happiness. Non-significant differences between young adult Assamese males and females on optimism and hope were obtained.

Nelson, Roberts and Snyder (2010) measured eighty-nine early adolescents for perceptions of hope, exposure to violence and perceived vulnerability to quality of life. Results showed the presence of high hope, together with a high degree of happiness. Ciarrochi, Heaven and Davies (2007) also examined the distinctiveness of "three positive thinking" variables (self-esteem, trait hope and positive attribution style) in predicting quality of life, teacher-rated adjustment and students' report of their affective states. It was revealed that each positive thinking variable was distinctive in some contexts but not others. Hope was a predictor of increase in hostility and fear, and low self-esteem was the best predictor of increases in sadness.

Valle, Huebner and Suldo (2006) in a longitudinal study involving middle and high school students, provided evidence of stability of hope reports of adolescents over 1-year period, predictive validity of adolescent hope reports and hope's functional role as a moderator in the relationship between stressful life events and adolescent quality of life. Taken together, the results provide support for consideration of hope as a key quality of life in youth. The findings are consistent with theories of motivation in which individual differences in hopeful thinking are conceptualized to play a functional role in linking life events and happiness.

Happiness and Quality of Life

Vallereux (2014) examined the relationship between happiness and quality of life, using the Day Reconstruction Method to test both the reward-sensitivity hypothesis as well as the situation-selection hypothesis. Data from a sample of 109 respondents were used to test the two hypotheses with repeated measure of quality of life on multiple reconstruction episodes. The results clearly show support for the situation-selection hypothesis with no significant support to reward sensitivity.

DeNeve and Coper (1998) conducted a meta-analysis of 137 participants on personality dimensions and happiness on quality of life. Of the Big Five, conscientiousness (r=.22) and neuroticism2 (r = -.24) were the two dimensions most strongly related to quality of life. Extraversion (r =.20) and agreeableness (r =

.13) and neuroticism (r = -.23) were most strongly related to quality of life. Openness to experience was the personality variable consistently least related to quality of life. Across the studies included in their analysis, DeNeve and Cooper found personality and happiness to be good predictor of quality of life.

In a study investigating the relationship between happiness and quality of life, Haslam, Whelan and Bastian (2009) found that happiness mediated the pathways of values to quality of life. The relationships between happiness and quality of life were shown to be due to variance both share with personality traits. Associations between happiness and quality of life were argued to be "indirect effects of more basic associations between happiness and quality of life". This study provides just one demonstration of the robustness of association between happiness and quality of life.

Perhaps unsurprisingly, Vella-Brodrick, Park and Peterson (2009) indeed found that personality predicted substantially more variance in quality of life than did happiness (adjusted R2 for models without personality versus models with personality in square brackets; life satisfaction 7.9% (19.9%), positive affect 26.5% (37.3%), negative affect 5.7% (34.8%). One's the Big Five personality factors had all been controlled for, each orientation to happiness domain predicted only very small amounts of additional variance for quality of life. For example, engagement was found to account for 1.8% of the additional variance in quality of life while pleasure and meaning did not predict quality of life at all once personality variables had been accounted for. Demographics, personality orientation to happiness accounted for 37.3% of variance in quality of life. However, of this variance, pleasure accounted for just 2%, meaning 14% and engagement 2.6%. Pleasure and meaning were also found to account for variance in quality of life to a small extent (1.1% and 1.8% respectively). Unlike the study by Haslam, Whelan and Bastian (2009), mediation and analyses were not conducted.

Interestingly, both the beta-weights for pleasure and meaning predicting quality of life were positive, indicating that higher endorsement of pleasure and meaning was associated with more quality of life. The authors speculated that this was connected to the theorizing put forward by Ryff and Singer (1998) that finding meaning in life can be associated with considerable hardship and mixed emotions, including at times profound negative emotions. This underscores an important point that all negative emotion is unhealthy. Indeed, Wong (2011) has lamented positive psychology's seeming fixation with positive emotion and claims that overcoming significant negative emotion is an important pathway to developing character strength and resilience.

A study conducted among Chinese University students showed that students who are happy experience higher level of quality of life than those who are not happy (Lu & Hu, 2006). Lu and his colleague's findings agreed with Lu and Shih (1997) earlier findings which also reported the same results. Spangler and Palrechal (2004) examined the influence of happiness on quality of life among 271 undergraduate and graduate students in Binghamton, USA and they found that students who are happy reported higher and lower level of quality of life. Personal strivings had no relationship with quality of life. Against this backdrop, this study investigated Social Support, Hope and Happiness as Predictors of Quality of Life among Health Workers in Makurdi Metropolis.

Hypotheses

The following hypotheses were formulated for the study:

i. Social support will significantly predict quality of life among health workers in Makurdi Metropolis.
ii. Hope will significantly predict quality of life among health workers in Makurdi Metropolis.
iii. Happiness will significantly predict quality of life among health workers in Makurdi Metropolis.
iv. Social support, hope and happiness will jointly predict quality of life among health workers in Makurdi Metropolis when demographic variables are controlled.

METHOD

Design

This study employed an ex-post facto design to investigate Social Support, Hope and Happiness as Predictors of Quality of Life among Health Workers in Makurdi Metropolis. The independent variables for this study are social support, hope and happiness. The dependent variable is quality of life among health workers.

Participants

The participants for this study were one hundred and seventy one health workers from Benue State University Teaching Hospital, Bishop Murray Medical Center and Federal Medical Center, all located within Makurdi Metropolis consisting of 67 (39.2%) Males and 104 (60.8%) females through purposive sampling method. As for their marital status 140 (81.9%) were married, 27 (15.8%) were single, and 4 (2.4%) were widowed. In terms of ethnicity, 114 (66.7%) were Tiv, while the rest were from other ethnic groups.

Instruments/ Measures

The researchers used four (4) instruments which include: Multi-dimenssional Scale of Perceived Social Support, Hope Scale, Happiness Scale and Quality of Life Scale.

i. Multidimensional Scale of Perceived Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS, Zimet, Dahlem,

Zimet & Farley, 1988) was used to assess perceived social support. The MSPSS is a 12-item questionnaire on a 7-point Likert-type, with one being Very Strongly Disagree and Seven being Very Strongly Agree. For possible total score of 84. Dahlen and Colleagues (1991) found a mean of 66.96 (5.58 average score for each question multiplied by 12 questions). Pfeifer (2011) found a mean of 70.72 (5.89 average score for each question multiplied by 12 questions). Factor analysis revealed three factors within perception of social support: friends, family and significant others (Clara, Cox, Enns, Murray & Torgrudc, 2003). Higher scores on each subscale indicate a higher level of perceived social support in that area, and the sum of the score yields a total perceived social support score. Alpha scores for the three subscales are .93 for friends, .92 for family and .93 for significant others (Clara *et al.,* 2003).

ii. Hope Scale

The Adult Trait Hope Scale developed by Snyder, Harris, Anderson, Hollerlan, Irving and Sigmon (1991) was used to measure the hope of the respondents. The scale contains 12 items. Four items measure pathways thinking, four items measure agency thinking and four items are fillers. Participants respond to each item using an 8-point scale ranging from Definitely False to Definitely True and the scale takes only a few minutes to complete. In a study conducted by Kermani, Khodapanahi and Heidari (2012), Cronbach's Alpha for the Hope Scale was found to be 0.86 and test-retest reliability was found to be 0.81

iii. Happiness Scale

Orientations to Happiness Scale (OTH; Peterson, Park & Seligman, (2005): This scale contained 18 items that measure happiness. The scale consists of 2 subscales (life of pleasure, life of engagement and life of meaning). The eighteen items scale consists of six items for each sub-scale. A sample item is 'My life serves a higher purpose' (life of meaning). Responses are given to the 5-point Likert scale ranging from 1 = 'very much unlike me' through 5= 'very much like me.' The OTH demonstrated good psychometric properties in various studies in Western society (Chen, 2010; Peterson *et al.,* 2007; Peterson *et al.,* 2005).

iv. Quality of Life Scale

Quality of life was assessed using the Brief Version of World Health Organization Quality of Life Scale. The self-administered questionnaire assesses the subjective QOL over the preceding 2 weeks. It has four (4) domains which include, the seven-item physical health domain, the six-item psychological health domain, the three-item social relationship domain, and the eight-item environment domain. In addition, WHOQOL-BREF contains two items on the overall Quality of Life and General health. The four domain scores are scaled in a positive direction.

Procedure

The study was conducted among 171 Health workers in Makurdi metropolis. Ethical approval and informed consent were sought and obtained before administration of the questionnaires. These health workers were instructed not to identify themselves in any way so as to guarantee their anonymity. The researchers prepared 187 copies of the questionnaire for administration, only 171 copies representing return rate of 91.44% were completed, submitted and found useful for statistical analysis.

Data Analysis

Data were analyzed using Hierarchical Regression to establish the independent and joint influence of Social Support, Hope and Happiness on Quality of Life among Health Workers in Makurdi Metropolis**,** as well as control for the demographic variables.

RESULTS

Table 1: Hierarchical Regression showing influence of Social Support, Hope and Happiness on Qualityof Life among Health Workers in Makurdi Metropolis after controlling demographic variables.

Independent Variable	**Dependent Variable**			
	Life Satisfaction			
	Step 1 (β)	Step 2 (β)	Step 3 (β)	Step 4 (β)
Age	-.016	-.058	-.083	-.085
Sex	-.029	-011	.008	.005
Marital status	-.013	.037	.025	.026
Religion	.000	-.018	-.018	-.009
Ethnic group	-.002	.041	.020	.021
Education qualification	.061	.124	.113	.111
Family support		.338**	.192*	.209
Friend's support		-.50*	.014*	.024
Significant others		.031*	.120*	.113
Hope			.337**	.362
Happiness				0.79**
R^2	.005	.102	.193	
Adj. R^2	.034	.049	.140	.198
ΔR^2	.005	.097	.091	.140
F- ratio	.119	1.938*	3.652**	.005
Δ F- ratio	.119	5.556**	17.238**	3.403**
				1.930*

*p<.05 ** p<.01

Hierarchical multiple regression was used in testing the hypotheses that were raised for the study. Quality of life was regressed on the predictor variables of social support; hope and happiness while the demographics (sex, age, marital status, religion, ethnicity and level of educational attainment) were control variables as presented in table 1 above.

The first step of hierarchical regression analysis showed no significant joint influence of age, sex, marital status, religion ethnicity and level of educational attainment on quality of life ($R^2 = .005$, $F = .119$, $p > .05$). Also, the result did not show a significant independent Contribution of any of the demographic variables on quality of life. This result implied that age, sex, marital status, religion, ethnic group and level of educational attainment did not predict quality of life of a health worker.

On the contrary, in step two, the social support variables were entered along with the demographic variables and the result showed that, all had significant joint influence on quality of life ($R^2 = .102$, $F = 1.938$, $p < .001$), accounting for 10.25% variance in quality of life. The inclusion of the social support variable resulted in 9.7% variance change ($\Delta R^2 = .097$) from what was in place when only the demographic variables were introduced. It was observed that support from family ($\beta = .338$, $p < .01$), friends ($\beta = -.50$, $p < .05$) and significant others ($\beta = .031$, $p < .05$) all contributed independently in predicting quality of life of health workers. This is consistent with hypothesis one of the study which stated that social support will significantly predict quality of life of health workers in Makurdi metropolis.

The introduction of hope in step three showed a significant joint prediction of quality of life ($R^2 = .193$, $F = 3.625$, $p < .001$), with all the variables accounting for 19.3% variance. But hope accounted for only 9.1% variance change ($\Delta R^2 = .091$). Independently, hope ($\beta = .337$, $p < .001$), positively and significantly predicting quality of life. The implication of this result is that, hope is a predictor of quality of life of health workers in Makurdi metropolis. This finding makes hypothesis two of the study which stated that "hope will significantly predict quality of life among health workers in Makurdi metropolis" confirmed.

When happiness was introduced in step four, a significant joint prediction of quality of life of health workers was realized ($R^2 = .198$, $F = 3.403$, $p < .001$), with all the variables accounting for 19.8% variance. However, happiness accounted for only 0.5% variance change ($\Delta R^2 = .001$). Happiness ($\beta = .079$, $p < .001$), independently and significantly predicted quality of life. This result makes hypothesis three confirmed, i.e. happiness will significantly predict quality of life of health workers in Makurdi metropolis.

DISCUSSION

Hypothesis one which stated that social support will predict quality of life among health workers in Makurdi metropolis was confirmed. This finding further buttressed that all the facets of social support that is, support from family, friends and significant others significantly predicted quality of life, with family support taking toll as the highest predictor of quality of life. This finding lends credence to the works of House (1981); Halbesleben (2006); Brown (2010); who found social support to be a significant moderator of quality of life. This result also agreed with earlier findings of Au, *et al.,* (2009); Young (2006); Yeung and Fung (2007) that support of friends and family significantly predicted quality of life. Stress buffering model posits that when faced with troubling situation and stress, individuals with greatest support from family and friends are less likely to become depressed than individuals with lower level of support. Since the work environment has been found to be stressful, the presence of perceived social support may have contributed to differences in quality of life of health workers.

This finding also tallied with those of Pearlin, Menaghan, Morton and Mullan (2001); Thoits (2005); Gore (2008) who in their various studies found social support to predict quality of life while facing stressful situations. This finding also agreed with the finding by Asane (2012) who investigated the association between age, gender, social support and quality of life of people living with HIV/AIDS (PLWHA) in Ghana and found social support to be a significant predictor of quality of life. Similarly, Adedimeji *et al.,* (2010) found social support to have predicted quality of life.

Similarly, the finding that social support predicts quality of life agrees with that of Calvete and Connor-Smith (2006) who in their study found support from family and friends to reduce the impact of psychological problems among workers thus increasing quality of life. The findings also support that of Dollete Steese *et al.,* (2004) who found that social support could act as a protective factor that could decrease psychological problems among workers such as stress.

The second hypothesis of the study revealed that hope significantly predicts quality of life. The implication of this finding is that health workers with high hope are more satisfied with life than those who have low hope. This finding corroborates with the work of Burtaverde (2012) who investigated the relationship between Body Mass Index (BMI) and hope, body esteem and quality of life and found a significant relationship between hope and quality of life. The finding also agrees with that of Karatas and Tagay (2012) who examined the relationship between hope, locus of control and multidimensional perfectionism and the extent to which the variables of hope, locus of control and

multidimensional perfectionism contribute to the prediction of quality of life and found a positive relationship between life satisfaction and hope. This finding also tallies with that of Rey *et al.,* (2011) who examined the relationship between perceived emotional intelligence, hope and quality of life and found a significant relationship between hope and quality of life. Furthermore, this finding corroborates with the finding of Westaway *et al.,* (2013) who also examined quality of life and hope and found hope to have highly correlate with quality of life.

Hypothesis three confirmed that happiness significantly predicts quality of life. This implies that health workers who are happy have higher quality of life. This finding supports the findings of Brandstadter and Renner (2010); Brandstadter and Baltes-Gotz (2010) and Chipperfield (2013). The findings that happiness predicts life satisfaction agrees with the finding by Grob (2000); Garber and Seligman (2010) who in their separate studies found a significant relationship between happiness and quality of life. The work of Owusu-Ansah (2008) also found significant relationship between happiness and quality of life.

Hypothesis four stated that social support, hope and happiness will jointly predict quality of life among health workers in Makurdi Metropolis when demographic variables are controlled. This hypothesis was therefore confirmed as there was a significant joint influence of social support, hope and happiness on quality of life among health workers in Makurdi metropolis. An explanation of this finding is that, social support, hope and happiness are important buffers of quality of life among health workers.

Implications of the Study

The results of this study have implications which are important for health managers and health workers. For instance, social support was found to have significantly predicted quality of life among health workers in Makurdi metropolis. Similarly, hope significantly predicted quality of life among health workers in Makurdi metropolis. It was also found that, happiness significantly predicted quality of life among health workers in Makurdi metropolis.

In this regard, health administrator's and non-governmental agencies with caring mind for the health sector should embrace all health workers and establish activities that will enhance their social support, hope and happiness so as to improve their quality of life. They should help encourage interpersonal relationships and support groups in the work place as these are important in ensuring the quality of life of health workers.

Limitations of the Study

Despite what this study claims to have achieved, it has some fundamental

shortcomings that may tend to undermine its generalizability. First, this study only focused on health workers in Makurdi metropolis. The replication of this study to other parts of the State and the rest of the federation as well as other professions may be important in generalizing the results. The inability of the researchers to explore other variables such as family background, hospital environment, personality traits and other perceptual factors that could also contribute to quality of life beyond the effect of social support, hope and happiness is another limitation of this study.

Secondly, the exclusive reliance on self-report measure may have led to common method bias associated with such research. Finally, all measures in the present study were collected on a single questionnaire at one time. A longitudinal study may help to establish cause and effect relationship. Despite these limitations, the present study has made conscious and scientific attempts to empirically investigate social support, hope and happiness as predictors of quality of life among health workers in Makurdi metropolis, Nigeria.

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FACTORS INFLUENCING MATERNAL PSYCHOLOGICAL ADJUSTMENT AMONG HIV-POSITIVE WOMEN IN SOUTH-WEST NIGERIA

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Abstract

This study examined the contribution of personal factors as predictors of maternal adjustment of HIV positive mothers in South-West Nigeria. A total of 1653 women in referral centres in the South West Nigeria completed the instruments. Data were collected with the use of questionnaire. Regression analysis revealed that independent variables: age, marital status, socio-economic status, emotional-intelligence and optimism predicted maternal adjustment positively with the exception of religion that predict maternal adjustment negatively. The ANOVA and model summary of regression analysis revealed joint contribution of the six independent variables taken together to have correlated positively with each other and with respondent's psychological adjustment R=0.335. The independent variables explained 11.2% of the total variance observed in the maternal psychological adjustment (R^2=0.112). Conclusion from the result implies that all the independent variables could influence respondent's maternal adjustment to some extent. Women who are emotionally intelligent and optimistically confident and well experienced in age would cope better in their present circumstances, according to the result of this study. Therefore, it is recommended that the women should be enlightened on emotional intelligence and optimism to enhance better adjustment to their situations. Adequate support from significant others is also germane to their effective psychological adjustment. Implications for maternal psychological adjustment with HIV/AIDS positive status were also discussed.

Key Words: HIV-positive mothers, Maternal Psychological adjustment, Optimism, South West Nigeria

INTRODUCTION

Giving birth is a very significant milestone in the life of any woman, while motherhood creates an ongoing exclusive experience that calls for serious adjustment. Motherhood is a period of multidimensional change, when the woman has to adjust in all ramifications, regardless of age or previous birth experiences. Belleza (2016) described the period as crucial, especially psychological changes that affect the woman. According to White (2010), childbirth is an overwhelming life change. Becoming a mother marks the beginning of parenting functions and change and after the first birth; things can never be the same for the woman again. Fulfilling these innate functions is more tasking than imagined and require a lot of physiological adaptations and social adjustment in the course of motherhood obligations. Street (2010) opined that motherhood is probably the most profound transition a woman experiences because it affects the woman in all ramifications and alters her life style. In addition to normal physiological changes that occur in all women after birth, the HIV-positive woman needs to continually adjust to a lot of other things, such as health, psychosocial and marital issues. Transition to motherhood requires a concerted effort on the part of the mother to be able to cope with the new roles of being a mother. This does not happen overnight, it happens gradually and sequentially as she goes through the different stages of parenting. Motherhood entails a lot of changes and the ability to cope well with the new situation is an outcome of good adjustment.

Adjustment is a psychological term that deals with the way individual adapts to an environment and the changes in life. According to Shaffer (1961), adjustment is the process by which living organisms maintain a balance between the needs and the circumstances that influence the satisfaction of the needs. Individual tries to influence his circumstances to overcome the difficulties in the realization of his needs. That is adjusting oneself to the prevailing circumstances by altering, adapting or accommodating oneself to the demand of the environment, he further explained. Adjustment can be regarded as psychological survival in the mist of changing circumstances. Taking clue from Darwin's theory of evolution in his book titled, “Origin of Species" (1859), he opined that, organisms that are capable of adapting to changing environment survive and those that cannot adapt die and become extinct. Applying this opinion to maternal adjustment after birth means that, mothers that are able to adapt to the changing circumstances will cope and also live a happier and well-adjusted mothering life while those that cannot would break down and be unable to perform their motherhood role. Hasting (2003) described adjustment as process of how a person achieves satisfaction of needs, therefore reducing tension, particularly when the means of

meeting the needs are blocked. Of course, many things can block the means of meeting the needs of a person. Normal phenomena in life, both good and bad can pose as obstacles to good adjustment in the life of a woman, such include normal positive events like getting married, becoming a mother, getting a job, getting promotion and negative issues such as, health challenges, chronic life-threatening ailments like cancer, HIV, heart and kidney diseases among mothers can be a significant obstacle that can affect the smooth adjustment to motherhood. Maternal adjustment can, in particular, be truncated by a life-threatening disease such as HIV as in the case with the women in this study.

Life is not static, but rather dynamic with its ups and downs. Maternal adjustment therefore, requires that individual mothers develop their psychological adaptive skills and capacities at their pace, in order to fulfill their maternal obligations. Post-natal period is an inevitable time of serious readjustment and adaptation of balance and imbalances coping skills. The process of balance and imbalances continues as the woman copes with the process of motherhood. It is well known that motherhood brings reality of new responsibilities and great effects on the woman's independence so much that ability to adjust may be greatly hampered. In support of this fact, Pereira and Canavarro, (2012) opined that the transition to motherhood can present many challenges; also Fraser and Raynor (2008) agreed that motherhood can have both positive and negative effects on a woman. A mother is described as well-adjusted when she is able to conform to the physiological, psychological, societal and personal changes, so when she is unable to cope with these changes she is described as being maladjusted. Motherhood, especially in the presence of HIV infection requires some extra adjustment skills to be able to cope with the demand; such as courage for disclosure of feelings, engaging in activities that relieve stress, joining support group and maintaining good hygiene, adequate diet, avoiding acts that can aid transmission of the virus to other members of the family.

Adjustment is a two-way course, it is either you fit yourself to the new situation or manipulate the circumstance to fit into your needs, so during the period of motherhood both the mother and the baby learn from each other, either consciously or unconsciously through process of adjustment. This adjustment does not affect her alone but all the house-hold members. HIV is one disease that affects the sero-positive mothers in such a way that it may influence her post-partum adjustment processes. An HIV-positive mother is considered well- adjusted if she is resilient to the demands of motherhood and at the same time copes with affliction of HIV. Maternal adjustment within the context of this study is concerned with HIV-positive mothers and their coping skill with

motherhood, in relation to age, marital status, religion, socio-economic status, emotional intelligence and optimism.

When a woman is diagnosed with a chronic life threatening disease like HIV, motherhood takes a more complex and different dimension. Women get scattered and ability of being able to cope with the new condition become doubtful. Motherhood with a positive HIV diagnosis can be devastating for some woman and can have positive or negative effects on their personal self-image and future, which require serious adjustment of the total life style. HIV infection puts a woman in more difficult terrain than other women experiencing motherhood because both the motherhood and HIV require adjustment of total being and life style. The presence of HIV among a family member is not only a threat to her but has a significant impact and can create stressor for the entire family. The family life now revolves round meeting the needs of that person at the same time coping with HIV infection. Greene, Delega, Yep and Petriono (2003) observed that, women living with a positive diagnosis of HIV face a life time challenge of physical, psychological and social challenges.

As the mothers progressively adjust to motherhood, certain factors are thought to impact on the process positively or negatively. Among these are the personal factors investigated in this study. Such include age, maternal marital status, socio economic status and religion of the woman, emotional intelligence and optimism could influence the women's psychological adjustment after birth.

Giving birth and becoming mother for the first time have a lot of impacts on women of all ages (Wang, 2009). Age might influence adjustment process because of the accumulated experience of the women over time especially if the women have delivered before. They might be able to adjust well to the new situation. Magai (2001) believed that, as people grow older they develop better ability to understand and cope with challenges of life because of accumulated experiences over time. This might influence the multiparous women to cope better Based on Bar-On's model, to be emotionally intelligent is to effectively understand and express oneself, to understand, successfully cope with demand, challenges and pressure of daily life (Bar-On, 2005). Going by this model, there is a strong correlation between emotional intelligence and maternal adjustment; an emotionally intelligent mother should be able to cope better in all situations including motherhood. Also, Wons a nd Bagiel (2011) identified emotional Intelligence as a basis for active, adaptive coping with stress. That means a person with high emotional intelligence can better recognize potential stressors and can use emotion in coping with problems. The authors concluded that individual style of coping with stress is connected with the level of emotional intelligence.

Moreover, optimism is an intent to put the most favourable construction in action or to expect the best possible outcome in any given situation, which forms an important psychological factor of adjustment, because to adapt to a new circumstance and cope with challenges the women need to adhere to rational active form of optimism. Optimism helps to replace sense of hopelessness with feeling of self-control (Scheier & Carver, 1985). Not only that optimism promotes health, it enhances perception (Peterson, 2000). Optimism has been found to improve perceived quality of life (Gen , 2002). An HIV-positive mother with optimism will not see her condition as a hindrance to effective maternal adjustment to motherhood (Peleg, G., Barak, O., Harel, Y., Rochberg, J. & Hoofien, D. 2009). There is good cause for optimism for HIV-positive women, due to positive reports on the progress made so far. In 2011 report of a study in South Africa by Burton (2013) showed a reduction of maternal mortality ratio of 354/100,000 (17.7%) per live birth among HIV-positive women, from 430/100,000 in triennial report covering 2008-2010, this is due to the use of Highly Active Antiretroviral Therapy (HAART) and other strategies to curb the disease.

Religion has been found to enhance adjustment capability in most people as many believe that their strength to successes is from God, "the Supreme Being". High level of spirituality/religion has been associated with less psychological distress, less pain, greater energy and will to live, better cognitive and social functioning and feeling that life has improved since HIV diagnosis (Iroson, Stuetzle & Fletcher, 2006). At the same time, it has been observed that some religious teachings promote non-compliance with medical services (Waite & Laharer, 2003), The reliance on God and rejecting therapy and the acceptance of HIV as a punishment for living sinful life styles , also HIV-related stigma beliefs and spiritual struggle has been associated with high level of depression and loneliness and poorer medical adherence among people living with HIV (Jenkin, 1995). However many faith-based groups have been found to play significant roles in the life of HIV-positive people, by encouraging and also alleviating their suffering, (Hinks, 2010), which in no doubt has enhanced their adjustment skills.

According to Combe (1991), adjustment cannot be overruled in marriage and motherhood, he opined that, married people are generally less stressful than their unmarried counterparts; for instance, married women would experience less stress because of the support they receive from their family members especially the husbands. Erinoso (2005) opined that family serves supportive functions in addition to economic, protective and socialization. It is generally believed that marriage brings happiness (Waite & Laharer, 2003). A study conducted in the

U.S. showed that married women had lower rate of suicide compared with their unmarried and divorced women (Brown & Jone, 2012).This is an evidence of ability to cope with situations.

The effect of socio economic status on HIV-positive mother cannot be over emphasized, as educational status, standard home facilities, occupation are very germane to HIV management and maternal adjustment (Commission on HIV/AIDS and Governance in African (2005). An HIV-positive woman that is socio economically stable; having a good job, living in an ideal home with basic facilities would adjust better to the new condition.

Hence, South-West Nigeria was chosen for the study, because, epidemiological studies revealed that about 17.6% of HIV infected people in Nigeria domiciled in South-West Nigeria (UNICEF, 2011 & NACA, 2012). This study, therefore, focused on the adjustment skills of HIV- positive women in this part of Nigeria, by investigating the influence the predicted personal factors (age, marital status, religion, socio-economic status, emotional Intelligence and optimism), may have on maternal psychological adjustment to motherhood functions as they nurture their infants in the reality of living with HIV/AIDS.

Statement of the Problem

One of the major problems facing mothers diagnosed to be HIV-positive is the issue of adjustment to motherhood and the disease, because both motherhood and HIV infection are stressful conditions and they require serious change and adaptation. The stress created by these conditions could make the woman less adjusted to motherhood functions. The women may be more vulnerable to post-partum complications, emotional breakdown, like depression and other maladaptive behaviours which may affect the normal maternal attachment and coping mechanism. Adjustment really, does not mean absence of problems but the manner in which one is able to tackle the problem. If some personal factors that can enhance adequate adjustment are identified and utilized, the women can be sure of effective psychological maternal adjustment in their present circumstances. Adequate adjustment can lead to happy and contented life even with the demand of motherhood and HIV infection. By identifying some significant factors and their direction of influence, the women can be helped to better adjust to most of the demands HIV infection is having on their motherhood functions and on their life in general.

Research Questions

1. What is the nature and direction of relationship between age, marital status, religion, socio-economic status, emotional intelligence, optimism and maternal adjustment to motherhood of women living with HIV in the South-West Nigerian?

2. What are the relative joint contributions of age, marital status, religion, socio-economic status, emotional intelligence, optimism to respondent's maternal adjustment?
3. Are there significant relative contributions of age, marital status, religion, socio-economic status, emotional Intelligence, optimism to respondent's maternal adjustment?

METHOD

This study adopted a descriptive survey design of *ex-post facto* type, which considered relationship, relative contribution of age, marital status, religion, socio economic status, emotional intelligence, optimism, to maternal adjustment to motherhood. Questionnaire was used to obtain information from the respondents. Analysis was done with the use of SPSS.

Population of the Study

The population for this study comprised all HIV-positive women, both pre-natal and post-natal mothers attending clinics in the South-West Nigeria, where an estimate of approximately 299,200 (17.6%) out of 3.4 million HIV infected women in Nigeria domiciled (UNICEF, 2011 & NACA, 2012).

Sampling Technique and Sample

A multistage sampling technique was used to select 1,653 participants for the study. Oyo, Ogun and Ekiti were randomly selected from the six states in the South-West Nigeria. Six study areas were purposively selected and these were two federal, two states and two faith-based HIV Care Centres. The women were stratified into their reproductive states and only those that were pregnant, nursing children or have nursed infants after being diagnosed with HIV were allowed in the study. Convenient sampling technique was adopted in obtaining information from the respondents.

Instruments

The instruments were packed into demographic section including age, religion, and marital status. Reliable and valid research instruments were used for the purpose of data collection in this study. They were: Wong and Law Emotional Intelligence Scale (WLEIS) r= 0.94 with 16 items, Optimism Scale, (OS) r=0.86 of 10 items, and Social-Economic Status Scale (which includes occupation, educational status, type of residence and facilities) (SESS r=0.73). While Adjustment Scale (AS) r=0.88 with 15 items was constructed by the researchers. The reliability of the instruments was established using Cronbach alpha.

Procedure for Data Collection

The research instruments were administered directly on the women after obtaining written and verbal permission from the ethical committees of the various centres. The participants completed consent

form and assured of confidentiality. Thirteen experienced research assistants were trained for 4-6 hours in the selected centres on how to administer the instruments and they were involved in data collection. Data collection lasted thirteen weeks in the three states.

Ethical Consideration

Principle of Beneficence was observed. The researchers ensured that questions asked were not harmful to the participants in any form. The principle of justice was also adopted: the participants were informed of their right to privacy throughout the procedure and that they were free to withdraw at any stage of the procedure if they so wished, without any form of persecution. Selection of participants was based on their sound understanding of the procedure. Anonymity and confidentiality were maintained at all times. Evidence of ethical consent attached.

Data Analysis

Data obtained were analyzed using multiple regression analysis. All the research questions were tested at $p< 0.05$ level of significance.

RESULTS

Research Question 1

What is the nature and direction of relationship among age, marital status, religion, socio-economic status, emotional intelligence, optimism and Maternal adjustment?

Table 1: Relationship between Age, Marital Status, Religion, Socio-Economic Status (SES), Emotional Intelligence, Optimism and Maternal Adjustment.

Variable	Age	Marital Status	Religion	SES	Emotional Intelligence	Optimism	Adjustment
Age	1						
Marital Status	.254**	1					
Religion	.029	-.099**	1				
SES	.001	-.054*	.627**	1			
Emotional Intelligence	.002	.067**	.129**	.162**	1		
Optimism	-.032	.044	.013	.064**	.257**	1	
Adjustment	.063**	.009	-.002	.043	.311**	.165**	1

Correlation is significant at the 0.01(1 tailed) *Correlation is significant at the 0.05 level (2 tailed) N=1,653

The results presented in the Table 1 showed that some variables were significant related while some were not. The results also reveals that age and adjustment positively related ($r=.063$, $p<.01$) which mean that the older patients, the better their adjustment to

their presence circumstance. Marital status was negatively related to social economic status (r=-0.054; p<0.05) and religion however, positively related with emotional intelligent (r=.067, p<.01). This simply denotes that those who are married experience less of social economic status while those who are unmarried experience more social economic status; however, the result revealed that marital status positively associated with adjustment which implies that those who are married were being enhanced by the support from their spouses to effectively adjust to their present situation. Additionally, religion positively and significantly correlated with social economic status (r=.627, p<.01), emotional intelligence (r=.129, p<.01); this result depicts that the more religious status of the participants the more they tend to have better social economic status and adjust to their situations. Moreover, social economic status significantly and positively associated with emotional intelligence (r=.162, p<.01) and optimism (r=.064, p<.01); this outcome showed that the social economic status enhanced the participant's emotional intelligence and the positive outcome of their present situation and life in general. Furthermore, the result of this study revealed that emotional intelligence positively related with optimism (r=.257, p<.01) and adjustment (r=.311, p<.01). The result depicts that emotional intelligence of the participants related with participant's positive approach to their situations and adjustment to their health condition. More so, optimism positively related with adjustment (r=.165, p<.01), in other words, optimistic view of situation enhanced the participant's adjustment to health condition. This revealed that most of the variables are related among themselves and mostly in a positive direction.

Research Question 2

Are there significant joint contributions of age, marital status, religion, socio-economic status, emotional intelligence, optimism to respondents' maternal adjustment?

Table 2: Contributions of Age, Marital Status, Religion, Socio-Economic Status, Emotional Intelligence, and Optimism to Maternal Adjustment

Model	S	Sum of squares	df	Mean Square	*f*	Sig.
	Regression	13951.936	6	2325.323	34.743	.000
	Residual	110165.128	1646	66.929		
	Total	124117.065	1652			

R =.335, R^2=.112, Adj R^2=.109, Std.Error = 8.181

Table 2 shows the ANOVA and model summary of the regression analysis for the study; the result revealed the joint contribution of six independent variables to

respondents' psychological adjustment. The results showed that all the independent variables taken together correlated positively with each other and with respondents' psychosocial adjustment R=0.335. This implies that all the independent variables could influence respondents' maternal adjustment to some extent. More so, the independent variables explained 11.2% of the total variance observed in respondents' maternal adjustment (R^2=0.112) leaving the remaining 89.8% to the residual and other factors that were not considered in the study. The level of significance of multiple correlation R=0.335 is shown in the ANOVA table (F ($df_{(6, 1646)}$ = 34.743 p<0.05) which implies that the joint contribution of all independent variables to respondents' maternal adjustment are significant. Thus, there was significant contribution of all independent variables to maternal adjustment.

Research Question 3

Is there significant relative contribution of age, marital status, religion, socio-economic status, emotional intelligence, and optimism to respondents' maternal adjustment?

Table 3: Relative Contribution of Age, Marital Status, Religion, Socio-economic Status, Emotional Intelligence, and Optimism to Respondents' Maternal Adjustment?

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta		
1	(Constant)	28.503	1.453		19.615	.000
	Age	.847	.262	.078	3.233	.001
	Marital Status	-.462	.282	-.040	-1.634	.102
	Religion	-.317	.146	-.065	-2.164	.031
	SES	.050	.055	.028	.917	.359
	E.I	.151	.013	.293	12.029	.000
	Optimism	.115	.030	.093	3.852	.000

Dependent Variable: Psychological Adjustment

Table 3 shows the result of the relative influence of all the independent variables to the respondents' maternal adjustment. The result revealed that emotional intelligence made the highest contribution to the maternal adjustment ($\beta = 0.293$, $p < 0.05$) which was significant at p<0.05, followed by level of optimism ($\beta = 0.093$, $p < 0.05$), and then age ($\beta = 0.078$, $p < 0.05$). This implies that a unit increase in emotional

intelligence will lead to corresponding 0.293 in maternal adjustment; also a unit increase in level of optimism and age will lead to corresponding increase 0.093 and 0.078 respectively. Thus, inference could be made that marital adjustment is the function of emotional intelligence, optimism level and age of the respondents. Thus, emotional intelligence, level of optimism and respondents' age made significant relative contribution to respondents' adjustment to motherhood.

DISCUSSION

The purpose of this study was to investigate six personal factors hypothesized as determinants of maternal psychological adjustment to motherhood and HIV infection among mothers in South West Nigeria. The first research question was to test for the relationship between the independent variables and the dependent variable. The result showed a significant statistical relationship between personal factors; (age, marital status, religion, socio economic status, emotional intelligence, optimism) and maternal adjustment to motherhood.

In this study, age was found to have contributed to adjustment positively. Not only that, age and marital status were significantly related. This implies that the older a mother infected with HIV grows; the better is her adjustment to the disease and motherhood roles. This is supported by study of Figueiredo and Tendals (2014) who reported that adolescent pregnant women showed lower adjustment and poor maternal attitude than adult pregnant women. Nema and Banssal (2015) described adjustment in relation to age as very crucial especially at mid-age, which doff tail into the reproductive period of a woman's life and the age when HIV infection is more prevalent; more so, women may manifest mood swing, depression, self-criticism and hostility. For a woman to escape these tendencies she needs to be more resilient to changes that accompany motherhood.

The roles of marriage which are to provide companionship support and procreation are highly germane to adjustment to motherhood and HIV infection. This is evidenced in this study. Marital status was significantly related to adjustment among the participants. This may be due to the support these women get from their spouses. Also, support from spouse and other family members could further enhance coping mechanism by married women. The outcome of this study supports the result in the work of Fox (2010) who opined that marriage serves as a buffer for effective adjustment in motherhood. However, Fox (2010) opined that the quality of partner relationship has profound implications for emotional adjustment. A non-supportive spouse could aid disease progression in HIV infection. A woman needs a supportive husband and other members of the family to cope with HIV

and motherhood. Family support is germane to coping strategies in HIV predicament and in the care of children.

The result of this study showed that there is a strong faith, trust and submission of respondents in their various religious beliefs (God/gods) in their ability to effectively adjust to the new circumstances and responsibilities. Many of the women believe that it is only God that can determine which baby acquires and which does not acquire HIV from the mother. This result also supported findings of scholars like; Diener (2010); Akinsola (2002); Hughes (2012) and Forney (2003), who all agreed that engaging in religious activities has potential means for emotional balance. This in turn aids adjustment and coping mechanism with new situations of HIV-positive women.

Socio economic status has jointly contributed to adjustment in these respondents. Although reports have found HIV to be costly to many households (CHGA, 2005), not only in terms of medical cost; it disrupts their work and has great impact on their income, including cost of burial, but the variable has contributed positively to maternal adjustment to motherhood. From the result of this study we can infer that if a woman is socio-economically stable, having good job with adequate income, living in an idea home, with basic amenities, she would adjust better because of her access to parameters of social economic status in (education, occupation and better living facilities) to meet the high demand of good food, drugs, the cost of living and care of the new baby and to maintain herself. Although the general belief is that HIV may lead some families to poverty, and those at poverty level may disintegrate to destitute (CHGA, 2005), but the result of this study is at variance with this view. The effort of Government and Non-Governmental organization by providing free services has tremendous positive effects on the women's quality of live.

Emotional-intelligence has significant and positive relationship with adjustment. This shows that the higher HIV-positive women are on emotional intelligence, the better they will be in terms of adjustment to motherhood and HIV. In conformity with the opinion of Bar-On (2005) who believed that emotional-intelligence is required in other to cope with pressures of life, HIV-positive women can be groomed in emotional intelligence, since emotional intelligence is a developing ability and can be learned in order to cope better with their condition.

According to the outcome of this study, optimism and maternal adjustment were significantly and positively related. This conforms to the finding of (Peleg, et al. 2009) who found optimism to play important role in adjustment indicating that, with optimism, women are capable of

adjusting well to their conditions because when there is a will, there is always a way to achievement of any pursuit in life, including good health.

The second question examined the joint contribution of the age, marital status, religion, socio-economic status, emotional intelligence and optimism to the prediction of the psychological adjustment. The results showed that all the independent variables taken together correlated positively with each other and with respondent's maternal adjustment to motherhood. The entire variables can be said to influence the women's adjustment to motherhood and HIV infection to a certain extent.

The third question examined the relative contribution of the age, marital status, religion, socio-economic status, emotional intelligence and optimism to maternal psychological adjustment. The result showed that emotional intelligence made the highest contribution to maternal adjustment, followed by optimism and the age which showed that any bust in the emotional-intelligence of the women would heighten their level of adjustment to their new situation. The rate of adjustment in these women corresponds with the strength of emotional-intelligence, optimism and the age of the women.

Conclusion

The six variables of study; age, marital status, religion, socio-economic status, emotional intelligence and optimism were valid as predictors of maternal adjustment of HIV-positive women to motherhood in the South West Nigeria. The study revealed that all the independent variables were related among themselves and with dependent variable in a positive direction. That means effective adjustment to motherhood among HIV-positive women requires personal effort by the women as well as psychological supports from significant others around them. Going by the outcome of this study, to prevent maladjustment and hitch-free motherhood experience by HIV-positive women in South-Western Nigeria, women need to be emotionally intelligent and optimistically confident in addition to their accumulated experience in age.

Recommendations

The findings of this study calls for the following recommendations:

To help the women consolidate their thought and adjust very well, they will require:

1. Counselling psychologists should be engaged by HIV treatment centres to help train HIV infected women on emotional intelligence. If this is done they will have better adjustment to their conditions.
2. Counselling psychologists should be engaged by HIV treatment centres to also help train HIV infected women on optimism. This is because

optimism is seen to predict adjustment positively.

3. It is clear from this study that better adjustment to motherhood and HIV comes with age, therefore counselling psychologists should give more and special attention to younger mothers during counselling considering the fact that they have less coping or adjustment abilities.

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EFFECTIVENESS OF STUDY SKILLS TECHNIQUES ON SCHOOL FAILURE AMONG SECONDARY SCHOOL STUDENTS IN ZARIA EDUCATIONAL ZONE

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Abstract
This study investigated the effectiveness of study skills techniques on school failure among secondary school students in Zaria Educational Zone. Four hypotheses were formulated to guide this investigation. The population was drawn from 49 public secondary schools in Zaria Educational Zone which cut across five Local Government Areas of Kaduna State with a sample size of 100 students. The study employs a quasi-experimental design involving pretest and post-test design, in which were assigned to study skills treatment techniques. The researcher used random sampling technique in the five schools. The instruments used for data collection was School Failure Assessment Scale Revised (SFAS-R) designed by Cruz (2009). Data were analysed using mean, standard deviation and independent t-test. Findings indicate that, significant effect exist in the effectiveness of study skills technique between treatment and control group (t=17.308, p=0.000). This implies that study skill technique of time management, reading, note-taking and study period procedures are effective in reducing school failure between the treatment and control group (t=13.999, p=0.000). There is a significant effect of study skill technique of home work between treatment and control group (t=4.577, p=0.000). This implies that study skills technique is effective between treatment and control group on gender (t=6.126, p=0.000). Based on the findings, it was recommended that psychologists and counsellors should be encouraged to use various study skills training in order to reduce school failure among secondary school students.

Keywords: Study Skills Techniques, School Failure, Secondary School Students.

INTRODUCTION

School failure is the person's inability to meet the minimum academic standard of education. Psacharopoulous (2008) define school failure as when the school system fails to provide services leading to successful student learning or when a student is failing to advance to the next grade and eventually becomes a dropout. Organisation for Economic Cooperation and Development (2010) maintain that school failure is the failure of the educational system which is unable to provide quality education for all. Panayiotis and Estrations (2008) believe that the definition of school failure do no only entails the students' failure but also with that of the educational system as it has not successfully met the learner's needs. It is very important to know that school failure is caused by multiple factors and the evaluations should not stop with one identification or only contributory factors. Some of these factors can be categorized into four factors which include psychological health, social and school factors.

1. Psychological factors

(a) Poor attention is the inability to have mental concentration or sustained concentration on a specific stimulus, sensation idea in an activity enabling one to use information available from the sense organ and memory store (Adeyemo, 2006). He further emphasized that poor attention is associated with lack of interest in the lesson from the learner due to lack of appropriate learning materials, lack of varieties in the method of teaching, lack of good atmosphere for learning and lack of learners of good accommodation from the parents or school and all these are major factors of school failure.

(b) Low Self-esteem is the feeling of individual competence and the ability to succeed at our goals in life (Ciccareli & Meyers, 2006). Inability of competence and achievement of goal, caused by low self-esteem can affect the academic performance of the adolescent will result to school failure.

(c) School absenteeism or truancy is unapproved absence from school, usually without the parent's knowledge (Schelff, 2007). Truancy affects students or learners of all ages. From all types of communities and socio-economic background, it is also connected to family problems including abuse, neglect, physical and mental health disorder and financial difficulties of the parents or care-givers of the child, and all of these result to school failure.

(e) Frustration is the state of emotional tension resulting to repeated failure or blockage on the attainment of desire goal (Good 2006). Good (2006) further explained that frustration lies in individual (internal) and the

(external) environment. These internal factors include elements like physical abnormalities, conflicting desires, inadequacy in the level of aspiration and lack of persistence and sincerity in effort. While external factors may be categorized as physical factors which include natural calamities like floods, droughts, earthquakes, fire incidence and accidents, all these factors can cause frustration to the learners and will lead to school failure.

(f) Drug abuse, according to American Psychiatric Association DSM III in Ehiozuwa (2011) occur the recreational or therapeutic use of psychoactive drug produce chronic changes in behaviour patterns and central nervous system activity that are both personally and socially debilitating. These changes include impaired social functioning, psychological dependence, physical dependence and drug induced organic disorder. All these are major factors of school failure.

2. Health Factors

(a) Mild visual and hearing disorder: Mild or partial sight (low vision) describes people who are unable to use their vision as primary sources of learning (Baraga, 2006).

(b) Mild hearing or conductive loss: according to Garwood (2007), conductive hearing losses result from poor conduction or sound along the passages leading to the sense organ (inner ear). The loss may result from a blockage in the external canal, as well as from an obstruction interring with the movement of the eardrum, or ossicle, inability to tackle mild or conductive loss and mild visual problems can lead to school failure.

(c) Sleep disorder or insomnia: Robert (2008) states that sleep disorder or insomnia may result from clinical syndromes, biological factors, drug abuse, or environmental issues, and this lead to the individual to have impaired functioning if the problem persists. Lack of sleep is associated with day time sleepiness, irritability, and problems with attention and concentration on learning and this can be a major cause of school failure.

(d) Autism: Autism is a developmental disability significantly affecting verbal and non-verbal communication and social interaction, generally evidenced before the age of three years and adversely affects educational performance (U.S. Department of Education, 1991). Autism is also characterized by irregularities and impairment in communication, engagement in repetitive activities and stereotyped movement, resistance to environmental change in daily routines, and unusual responses to sensory experience (Cullbery,

2010).

(e) Malnutrition and nutritional deficiencies: Malnutrition is termed as illness or weakness caused by not having enough food to eat or by not eating good food (Longman 1995). Nutritional deficiencies are contributing factors for high rates of morbidity mortality and disabilities in learning. Malnutrition is a pathological condition brought about by the inadequacy of over-consumption of one or more of the essential nutrients necessary for survival, growth and learning activities (UNICEF 2001).

These deficiencies are in protein food, vitamin A, iron, iodine and zinc. Vitamin A deficiency has been attributed to respiratory infection and diarrhoea, iron deficiency cause impaired mental development, impeded cognitive functioning and also affect learning activities. Iodine deficiency makes cognitive and intellectual functions vulnerable, encourage slow learning and zinc deficiency also cause poor mental development (UNICEF, 2001). Improper intake of food causes school failure.

3. Social Factors

(a) Divorce: Sellgren (2010) states that poorly managed conflict between parents that lead to divorce increased children's risk of behaviour problems, which include depression, substance abuse, dependence, poor social skills and academic failure and this a major contributor of school failure.

(b) Unemployment: Unemployment occurs when people who are without work are actively seeking for paid work. It is also include workers sacked due to economic crisis, industrial decline, company bankruptcy or organizational restructuring (Ashley, 2007). High and persistent unemployment, in which economic inequality increases, has a negative effect on economic growth and children education. It leads to homelessness, increased susceptibility to cardiovascular disorder, anxiety disorder, depression and cases of suicide (Ashley 2007).

(c) Peer Pressure: Peer pressure or social pressure is commonly associated with episodes of adolescent risk-talking because these activities commonly occur in the company of peers (Laurence & Monahan 2007). Speer (2011) also states that affiliation with friends who engage in risk behaviour has been shown to be a strong predictor of an adolescent's own behaviour and also have negative effect, which include occultic activities, low academic performance, truancy, smoking, alcohol intake, armed robbery, prostitution and even death and all these are evidences of low academic

performance that lead to school failure.

(d) Teenage pregnancy: Teenage pregnancies are often associated with social issues including lower educational levels, high rates of poverty. It is usually outside marriage, and carries a social stigma in many communities and culture (Hamilton & Ventura, 2012). According to the United Nations Population Fund (UNPFA) (2013) teenage pregnancy affect the girl-child education and income potential as many of them are forced to drop out of school will ultimately threatens future opportunities and economic prospect, which can be a major evidence of school failure.

(e) Child neglect and Abuse: According to Child Study Center (2006), child neglect and abuse is the maltreatment which involves any act of commission or omission – which endangers or impairs a child's physical or emotional health and development. This type of maltreatment includes physical abuse, sexual abuse, emotional or psychological abuse and neglect. Smith and Segal (2013) further explained that all types of child neglect and abuse leaves a lasting scar, but psychological or emotional scars have a long lasting effect throughout life, and these include the following.

(f) Cognitive development or deficit, language development, depression, panic disorder, attention deficit and hyperactivity disorder and attachment disorder.

4. School Factors

According to Abolarin (2006), school factors are used by:

- Unstable curriculum structure
- Lack of fund by the government
- Lack of adequate learning materials by the government
- Inadequate classroom accommodation
- Lack of quality of teaching by the teachers
- Lack of concern about individual differences by the teachers.
- Lack of concern about individual differences by the teachers
- Lack of using proper reinforcers by the teachers.
- Lack of security in the school environment.

School failure is a more persistent problem that might be characterized by some of the following signs:

- Avoidance of school work and home work
- Lack of attention and concentration in the classroom
- Lack of interest in the classroom activities
- School refusal
- Truancy

- Anxiety
- Somatic complaints, that is, diarrhea, irritable bowel, fatigue, headache and stomach
- Drug and alcohol use
- Aggression
- Poor academic result
- Social withdrawal

The home is the first agent of socialization through the parents, so the problem of school failure starts from the home because of the parental attitudes. This parental attitudes include poor parental supervision of school work, harsh parental discipline, marital conflict in the presence of children, inability to pay school fees and provide adequate study or school materials to the child, poor communication between the children and the parents, parental mental illness, unemployment of parents are all associated with school failure and affect the academic performance of the learner (Bryd, 2005).

The breakdown of communication between the learners and teachers, over-population of the learners in classroom, shortage of teachers and undue application of corporal punishment as well as peer influence at school, illness of the child, high cost of school materials, the location of school, that is, (when the school is too far from where the learner live), inability of the learner to understand the language of communication in the school are all evidences of school failure (Ubogu 2004).

In spite of the various efforts by teachers, school psychologists, counsellors in the use of punishment, shaping, token economy modelling, time out and various techniques, in addressing school failures, the problem among secondary school students continue to be on the increase. The use of study skills techniques may be effective in reducing the problem of school failure. Study skills techniques (SST) are approaches applied to learning and are generally critical to success in the school (Contribution of Study Skills to Academic Competence, 2009). SST is considered to be essential for acquiring good grades and useful for learning throughout one's life. SST is also effect in improving the academic performance of the learner (Duru 2001).

Kiewsa (2012) assert that students fail in examination simply because they lack study skills or examination simply because they lack study skills or examination techniques. SST boosts the learner's ability to study, retain and recall information which assists the learner in passing their examination and also provide different techniques that can be learned in a short time and can be applied in all or most fields of study (Management, Reading, (Note-taking and Home Work) (Carey, 2015). SST involves teaching students to utilize a process for thinking,

usually in steps (Corey 2015). It requires the students to "recognize, recall, and execute the particular steps in the study skills". By mastering these skills, the students are equipped with the tools to learn, and these make it effective to tackle the school failure among secondary students. It is against this background that this study seeks to investigate the effectiveness of study skills techniques on school failure among secondary school students in Zaria educational zone, Kaduna State, Nigeria.

Research Questions

This study will provide answers to the following research questions:

1. What is the effectiveness of study skills techniques (SST) on school failure among secondary school students in Zaria Educational Zone?
2. What is the effectiveness of study skills techniques (SST) of time management, reading, note-taking and study period procedure on school failure among secondary school students in Zaria educational zone?
3. What is the effectiveness of study skills techniques (SST) of home work on school failure among secondary school students in Zaria educational zone?
4. What is the effectiveness of study skills techniques (SST) on school failure between male and female among secondary school students in Zaria educational zone?

Hypotheses

1. There will be no significant effect of study skills techniques (SST) on school failure among secondary school students in Zaria educational zone.
2. There will be no significant effect of study skills techniques (SST) on school failure (time-management, reading, note-taking and study period procedure) among secondary school students in Zaria educational zone.
3. There will be no significant effect of study skills techniques (SST) on school failure (home-work) among secondary school students in Zaria educational zone.
4. There will be no significant effect of study skills techniques (SST) on school failure (male and female) among secondary school students in Zaria educational zone.

METHOD

The study was executed using a quasi-experimental design, involving pretest-post-test design. The population of the study comprises all government senior secondary school (SS II) students in Zaria educational zone, Kaduna "State. The sample was drawn from 49 public secondary schools in Zaria educational zone which cut across five local government areas of Kaduna State, namely: Zaria, Sabon Gari, Soba, Giwa and Kudan respectively.

The sample of the study consists of 100 identified school failures in SS II from four schools in Zaria educational zone. To compose this sample, the researcher used random sampling in the five schools from Zaria educational zone which include one school in Zaria, Soba, Giwa, Sabon Gari and Kudan. The researcher assigned the five schools into the treatment group and control group.

The instrument tagged SFAS-R (School Failure Assessment Scale Revised) developed by Cruz (2009) was adapted and used for this study. The scale ranges from Strongly Agree (5), Agreed (4), Undecided (3), Disagreed (2) and Strongly Disagreed (1).

The SFAS-R was face-validated by three experts in educational psychology, guidance and counselling of the Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria for their criticism and inputs relating to the appropriateness of the items and clarity of the language.

An internal consistency reliability estimate was obtained through the Cronbach Alpha method at 0.78. A test retest reliability to determine the stability of the instrument over time was conducted. In order to achieve this, second administration of SFAS-R was conducted after two weeks and the scores obtained from both administrations were correlated using Pearson correlation formula. This yielded a test-retest reliability estimate of 0.81. Data were analysed using mean, SD and independent t-test.

Procedure for Data Analysis

The basic premise of study skills theory is to prepare students for specific skills such as organizing, listening and retaining information that can be applied in a variety of settings and situations which will encourage good school behaviour and discourage school failure.

Pre-treatment

Before the commencement of the treatment, the researcher will take time to familiarise him/herself with the students to ascertain their competency, interest and the academic problems they encountered in school. This will help the researcher in determining how best to motivate the students to acquire new skills immediately after assigning the classes to treatment and control groups and the SFAS-R will be administered to them. In order not to disrupt the school activities, SST will be done during free periods. The experiment was designed to task for six weeks.

Treatment Phase

Study Skills Techniques (SST)

Week 1

Session 1: Establishing the relationship

Session 2: Nature, purpose and process

Session 3: Visual imagery: Clients are

taught to have a visual learning style that will benefit them greatly from taking information from their studies which are verbal and using visual imagery techniques to help encode and retain it in memory.

Week 2

Session 4: Time management: The therapist teaches the clients on how to manage time that is by following a schedule of study in order to organize and prioritize study in the context of completing activities of class work at the appropriate time.

Sessions 5 and 6: Reading – Reading is done in a skilful manner and could be very profitable. Effective reading techniques include major headings or the points in the syllabus.

Question: The client formulated questions to be answered following a thorough examination of the topic.

Read: The client reads through the related materials, focusing on the information that best relates to the questions formulated earlier.

Summary: The clients summarize the topic by bringing his or her own understanding in the process.

Test: The client will answer the questions drafted earlier, avoiding or adding any questions that might distract or change the subject.

Week 3

Session 7: Note-taking: The technique involves the therapist teaching the client on note-taking in the classroom. Note-taking helps the client to remember information presented in the classroom or reading from textbook by:

- The client should copy complete notes.
- Use abbreviations that make sense
- Rewrite or recopy your notes to facilitate understanding and to fill in gaps.
- Do not rely completely on your notes, use additional sources.

Week 4

Session 8: Flash card Training.

Flash card trainings are usually cues on cards. Clients often make their own flash cards or more detailed index cards. Cards are designed for filling, often on A5 sizes on which short summaries are written. This allows the client to pick a section to read over, or choose randomly for self-testing.

Session 9: Buzan Mind Maps.

It involves the therapist training the clients on how to remember key factors to develop a mind map, the clients use a sheet of paper and put the topic or subject in the middle of the page with branches, on each branch you only write the key words and for every key word you write, you should put first image that comes into your mind, when you think about the key word.

Week 5

Session10: Rehearsal.

This technique involves the act of memorization which is a deliberate mental process undertaken in order to store in memory for later recall such as experiences, names, appointments, addresses, telephone numbers, stories, poems, pictures, maps, diagrams, facts, and auditory information. These techniques teach the clients how to read over notes or textbooks and re-writing notes.

Week 6

Session 11: Home Work.

The therapist commonly gives assignment to clients to help them learn new ways of dealing with current school problems on their own.

Week 7

Session 12: Revision of SST and re-administration SFAS-R

Post-treatment

The SFAS-R were administered to the subjects in the treatment groups and those in the control group immediately after the treatment is completed.

RESULTS

Research Question 1

Table 1: Mean scores and of students on study skills techniques in Zaria Educational Zone

Group	N	Mean	Std. Deviation
Treatment	50	170.1400	16.3170
Control	50	128.2600	12.2070

The result in table 1 indicates the secondary school students exposed to SST on school failure obtained mean score of 178.1400 with SD 16.3170 and those in control group had a mean score of 128.2600 with SD 12.2070 respectively. This table indicate that, SST techniques on school failure had significant influence on those exposed to treatment had higher mean scores (178.14) while those who were not exposed to it had lower mean scores (128.26).

Research Question 2

Table 2: Mean Score and SD on the Management, Reading, Note-taking and Study Period Procedures

Group	N	Mean	Std. Deviation
Treatment	50	92.6600	9.87185
Control	50	67.2800	8.17922

The result in Table 2 indicates that secondary school students in Zaria educational zone treatment group had a mean score of 92.6600 and with SD 9.87185 and those in control group had mean score of 67.2800 with SD 8.17922. This indicates that students who were exposed to treatment had higher mean scores (92.66) while those who were not exposed to treatment had lower mean scores of (67.28) indicating that students who were exposed to SST on time-management, reading, note-taking and study period procedure had their school failure reduced.

Research Question 3

Table 3: Mean Score and SD on Home Work

Group	N	Mean	Std. Deviation
Treatment	50	20.3400	4.46579
Control	50	17.0600	2.39395

Table 3 reveals that the treatment group had mean score of 20.3400 with SD of 4.46579 on homework, while the control group had mean score of 17.0600 and SD of 2.39395. This indicates that students who were exposed to treatment with SST on home work had higher mean score (20.3400) while those who were not exposed to treatment had lower mean scores (17.0600). This shows that students exposed to SST on home work had their school failure reduced.

Research Question 4

Table 4: Mean Score and SD on Gender

Group	N	Mean	Std. Deviation
Male	25	188.8400	9.4325
Female	25	167.4400	14.7000

Table 4 shows that male students had a mean score of 188.8400 and SD of 9.4325 while the female respondents had mean score of 167.4400 and SD of 14.7000 respectively. This indicates a significant difference on the male respondents showing more gain than the female in the treatment.

Hypotheses Testing

Hypothesis Testing 1:

Table 5: Independent t-test analysis of difference in SST between treatment and control group

Group	N	Mean	SD	SE	df	t-cal	P (sig)
Treatment	50	178.1400	16.3170	2.30758	98		
Control	50	128.2600	12.2070	1.72634		17.308	0.00

Significance at P>0.05

Table 5 above reveals that calculated t-value is 17.308 and calculated p-value is 0.000. Those exposed to SST on school failure recorded greater improvement than those in control group. As a result of this, the null hypothesis which states that: There will be no significant difference on the effect of study skills techniques (SST) on school failure among secondary school students in Zaria educational zone is hereby rejected.

Hypothesis Testing 2:

Table 6: Independent t-test analysis of difference between the treatment and control group on time management, reading, note-taking and study period procedures

Group	N	Mean	SD	SE	df	t-cal	P (sig)
Treatment	50	92.6600	9.87185	1.39609	98	13.999	
Control	50	67.3800	8.17922	1.15672			0.00

Significance at P>0.05

Table 6 reveals t=13.999, P = 0.000. Those exposed to SST on time management, reading, note-taking and study period procedure recorded greater improvement than those in the control groups. As a result of this, the null hypothesis which states that: There will be no significant effect of SST on school failure (time management, reading, note-taking and study period procedure) among secondary school students in Zaria educational zone is hereby rejected.

Hypothesis Testing 3

Table 7: Independent t-test analysis of difference between the treatment and control group on home work

Group	N	Mean	SD	SE	df	t-cal	P (sig)
Treatment	50	20.3400	4.4579	.63156	3.577		
Control	50	17.0600	2.39395	.33856		17.308	0.00

Significance at P>0.05

The above table reveals t = 4.577, P = .000. Those exposed to SST on homework recorded greater improvement than those in the control group. As a result of this, the null hypothesis which states that: There will be no significant effect of SST on school failure (Home work) among secondary school students in Zaria educational zone is hereby rejected.

Hypothesis Testing 4

Table 8: Independent t-test analysis of difference between treatment and control group on gender

Group	Gender	N	Mean	SD	SE	Df	t cal	P (sig)
Treatment	Male	25	188.8400	9.4325	1.88651	48	6.126	
Control	Female	25	167.4400	14.7000	2.94000			0.00

Significance at P>0.05

Those exposed to SST on gender recorded greater improvement than those in the control group. As a result of this, the null hypothesis which states that: There will be no significance effect of SST on school failure (gender) among secondary school students in Zaria educational zone is hereby rejected.

DISCUSSION

Findings indicate that study skills technique was effective in reducing school failure among secondary school students. This finding is in line with Durul (2001) in which he states that SST is considered to be essential for acquiring good grades and is useful for learning throughout one's life, and also effective in improving the academic performance of the learner. SST has been used as a supporting procedure in the treatment of school failure, poor study habits, examination anxiety, management of time in test and examination, note-taking and reading skills.

The result of the second and third hypotheses revealed that SST was effective in reducing school failure (time management, reading, note-taking, study period procedure and home work. This finding is in line with Carey (2015) in which he states that SST can boost the learner's ability in short time and can be applied in all or most field of study in time management, reading, note-taking and home work.

The fourth hypothesis was significant. Result shows the effect of gender on skills techniques because the male students proved to have better study skills than the female.

Therefore to effectively address or reduce school failure relating to time management, note taking, reading and homework, school psychologist and counsellors need to use effective techniques for learning and retaining information.

Conclusion

Findings indicate that study skills techniques were effective in reducing school failure among secondary school students in time management, reading note-taking and home work. Finally male students have proven to have better study skills than their female counterparts among those who receive treatment.

Recommendations

1. School psychologists and counsellors should be employed in schools and taught how to use various study skills training in order to reduce school failure among secondary schools.
2. Class teachers who notice their students performing very poorly can also adapt the use of various study skills techniques for their students' successes in the classroom.
3. Seminars, workshops and conferences should be organized to trains chool psychologists, counsellors and classroom teachers on the use of SST in reducing school failure among secondary school students.

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ASSESSMENT OF PERSONALITY TRAITS AMONG RECRUITS OF THE NIGERIAN POLICE ACADEMY

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Abstract

The study is aimed at assessing personality traits of candidates seeking for admission into the Nigerian Police Academy (NPA). The researchers used past records of the recruitment exercise at the Nigerian Police Academy, Wudil-Kano to examine the personality profiles of the candidates and their performance ability. A total of 2,453 (comprising of 2,173 males and 280 females) candidates were assessed on personality traits of Extraversion-Introversion, Neuroticism and Psychoticism using the short form of Eysenck Personality Questionnaire (EPQR-S). The age range was from 18 years to 29 years, while the mean age for the group was 20.09. Results of the study indicate that 2,206 (89.9%) candidates manifested stable personality traits, while 247 (10.1%) candidates manifested unstable personality traits of neuroticism and emotional instability which are likely to affect their performance during training and subsequent adjustment as law enforcement officers. The relevance of the study to the selection process and monitoring of cadets' performance during training in the Police Academy was discussed.

Key words: Assessment, Personality traits, Recruitment and Policing.

INTRODUCTION

The nature of Police job is a labor-intensive work that requires both physical and emotional fitness. A high level of emotional dedication is demanded in the performance of police duties in difficult and unsafe situations such as chasing down criminals, crackdowns, participating in interventions, establishing contact with hostile and aggressive people, helping desperate people and so forth. This indicates that the nature of police work is very complex and challenging. To meet up with these challenges, the Nigerian Police Academy (NPA) Wudil, Kano which was established by the Federal Government of Nigeria in 1988 was subsequently upgraded to the degree awarding institution in 2013 for the purpose producing high quality manpower police personnel at the Assistant Superintendent of Police (ASP) and Inspectorate Cadre. The institution had introduced selection process for candidates that involved conducting in-depth psycho-metric procedures to admit candidates into the Academy. The recruitment process involved a multi-step process; one of which is Psychological Assessment, intended to contribute information on the overall personality profiles of the candidates seeking admission in the Nigerian Police Academy.

Psychological testing has been considered a useful tool for assessing law enforcement officers since the 19th century (Drees, Ones, Cullen, Spilberg, & Viswesvaran, 2003). Today, a growing body of evidence suggests that job performance depends to a large extent on features that are not entirely knowledge or skills, but on individual dispositions (Barrick & Mount, 2005; Conard, 2006; Ozer & Benet-Martínez, 2005). Although, cognitive abilities have traditionally been used as the main measure to select police candidates, meta-analytic studies have shown the benefits of assessing personality traits as job predictors (Aamodt, 2004a, 2004b; Barrick & Mount, 1991; Salgado, 1997; Tett, Jackson & Rothstein, 1991).

Personality assessment has been considered as one of the major dimensions used for personality measures in personnel selection (Guion & Gottier, 1965; Mischel, 1968). Barrick, Mount and Judge (2001) reported that no one method has been systematically used to compose a small, manageable set of personality predictors. Personality is an essential issue for human resource management since it considers the importance of values, perceptions and other personal features of workers (Guney, 2006). In addition, personality is used in several management processes while hiring, placing, promoting, and so on. Especially, using personality features while choosing personnel for various duties in the organizations are beneficial to have better work-person organization fit (Stanton & Matthews, 1995).

The primary emphasis of law enforcement

selection efforts has been to study the link between personality traits and job performance, and in most cases, personality has been found to be a good predictor of job performance (Tett, Jackson, & Rothstein, 1991). Personality can add further confirmation of good performance beyond other predictors (e.g., cognitive ability). It can help in the assessment of potential interpersonal skills and can be paramount in selecting employees that have the greatest potential for working together and developing positive relationships. Screening for the personality characteristic of conscientiousness can be beneficial, as it has been shown to be associated with job performance (Arrigo & Clausen, 2003). Personality traits are primary motivational factors in risk-taking behaviors.

Furthermore, Agashua (2014) reported that personality traits of Introversion-Extroversion dimension identify the strengths (Profitable traits) and weaknesses of the candidates, while Neuroticism dimension detects candidates who are most vulnerable to the stresses of academic training and law-enforcement duties. He described Psychoticism as a dimension of personality that determines candidates with psychopathic tendencies such as bullying and aggressive behaviour, proneness to corrupt practices and anti-social behaviours. The Lie Scale dimension detects those individuals who are dishonest or prone to present themselves in a socially desirable light. Reports of another study show that Police officers who score high on the Lie scale demonstrate poor judgements in the field, particularly under emergency or crisis situation, and become confused and disorganised (Bartol, 1991).

One of the justifications or pressing reasons for using personality variables in the selection process is to control the chances of a dangerous officer being allowed in such an authoritative position (Varela, Boccaccini, Scogin, Stump, & Caputo, 2004). Excessive authoritarianism can be a problematic quality among police officers, primarily because the role of Police officer is an authoritative position. It is on this note that the researchers carried out this research to assess the personality traits among recruits of the Nigerian Police Academy.

Aim and Objectives of the Study

The aim of the present study is to assess the personality traits among candidates seeking admission into the Nigerian Police Academy. Specific objectives include; to identify personality traits of the candidates in order to build their profiles and to determine if personality traits had impact on their performance during training in the Academy.

Literature Review

Empirical evidence indicates that personality assessment is one of the most important methods in the selection of law enforcement personnel. Highly influential meta-analytic studies by Barrick and Mount

(1991), Tett, Jackson and Rothstein (1991) and Salgado (1997) included police officers as one of their occupational groups to illustrate the validity of personality predictors for performance appraisal. In his comprehensive report, Aamodt (2004) reviewed many studies using personality variables to assess different police performance outcomes, highlighting the importance of personal dispositions for predicting performance in these contexts. Other meta-analytic studies also indicate the usefulness of personality measures as screening tools in law enforcement contexts (Varela, Boccaccini, Scogin, Stump & Caputo, 2004).

Forero, Gallardo-Pujol, Maydeu-Olivares and Andrés-Pueyo (2009) studied the effect of personality and motivation on actual performance and how well training in the Police Academy predicts performance. Three different personality assessments were used to measure different facets of personality. Results demonstrated that job performance could be predicted by psychological data, but that the relationship was mediated by training. They also found that successful Police officers tended to have higher emotional stability and conscientiousness than non-successful Police officers. These findings add credence to previous studies that high emotional stability and conscientiousness are good indicators of performance.

Further review indicates that Black (2000) found significant univariate correlations between the Neuroticism (N), Extraversion (E), and Conscientiousness (C) domains of the NEO Personality Inventory-Revised (NEO PI-R) and a global measure of performance that included academic performance, physical performance, handling firearms, driving, and other skills. Black considered the isolated effect of personality on prediction and performed a multivariate analysis with domain scores to predict global performance.

Detrick, Chibnall and Luebbert (2004) extended the findings of Black in an American sample using disciplinary outcomes as an outcome criterion. First, they explored academic performance, finding positive relationships at the facet level between performance and the facet values from the Openness (O) domain and Excitement-Seeking from the Extraversion domain. These domains accounted for a significant percentage of performance variance (24% to 25%). These authors also found more specific relations between personality and individual skills. For firearms performance, anxiety was the facet that was the best predictor. Physical performance was predicted at the facet level by Deliberation (Conscientiousness), Fantasy (Openness), and Activity (Extraversion). With respect to Absenteeism, the model had an overall predictive accuracy of 95%; significant predictors were Self-Consciousness (N), Altruism (Agreeableness), Feelings

(Opennes), Order (Conscientiousness), Positive Emotions (Extraversion), and Vulnerability (Neuroticism). Interestingly, Detrick and colleagues found that trainees who did not graduate from the Academy scored significantly higher on Depression, Impulsiveness, and Vulnerability scores (Neuroticism) and lower on Competence (Conscientiousness).

All these findings are in agreement with the results of meta-analyses by Barrick and Mount (1991) in the United States and by Salgado (1997) in the European Union, which identified these traits as important personality factors for police performance. These results also collaborate the existing literature on job personality and job performance in law enforcement and non–law enforcement populations (Barrick & Mount, 1991; Piedmont & Weinstein, 1998; Salgado, 1997; Tett, *et al.,* 1991). In spite of this support for trait assessment in personnel selection, different occupational contexts demand different personality traits, and assessment tools can be explicitly aimed to appraise these traits either in isolation or in combination (Tett, *et al.,* 1991).

METHOD

Design

The researchers adopted a retrospective survey design to assess the personality traits among candidates seeking for admission into the Nigerian Police Academy, Wudil-Kano.

Participants

A total of 2,453 candidates (comprising 2173 males and 280 females) across the 36 States and FCT Abuja were assessed on personality traits for the Nigerian Police Academy Selection Board. The age range was from 18 years to 29 years, while the mean age for the group was 20.09.

Instrument

The Short form of Eysenck Personality Questionnaire (EPQR-S) devised by Eysenck, Eysenck and Barret (1985) was used for the purpose of measuring personality. The EPQR-S is the shortest version of the series of personality inventories which consists of 48 items with 12 items per scale designed to measure four aspects of personality including Psychoticism (Tough minded), Extraversion, Neuroticism and "Lie Scale" which attempts to measure a tendency on the part of the individual to "fake good". In addition, Eysenck, *et al.* (1985) reported alpha reliability coefficient of the EPQR-S for the 4 subscales for male and female as follows: P = (0.62 -males), (0.61-females), E= (0.88-males), (0.84-females), N= (0.84-males), (0.80-females), L= (0.77-males), (0.73-females). The Nigerian norms formed the basis for interpreting the scores of the candidates. Candidates who score higher than the norms on scale P and N manifest the typical personality characteristics. In the case of scale E, a score higher than the norm

indicates extraversion and a score lower than the norm indicate introversion (Eysenck, Adelaja & Eysenck, 1978).

In the present study, the norms were used as criteria for categorizing participants into high or low scorers on each of the PEN scales such that high scorers on the P scale were categorized as tough-minded, whereas low scorers were categorized tender-minded. High scorers on the E scale were categorized as extroverts while low scorers were categorized as introverts. Furthermore, high scorers on the N scale were categorized as neurotics, whereas low scorers were categorized as non-neurotics. The EPQR-S is widely used in cross cultural studies including Nigeria, with high reliability coefficients (Barret & Eysenck, 1984; Jegede, 1980 & Osinowo, 1994).

Procedure

The Chief psychologist on the Nigerian Police Academy Selection Board adopted a comprehensive assessment which includes interview of the candidates and the administration of the Short form of Eysenck Personality Questionnaire-EPQR-S. The assessment of the candidates was conducted in three (3) batches; each batch was allowed 1hr 40 minutes to complete the tests which comprised of EPQR-S and other psychological tests. When the time elapsed, the candidates submitted the questionnaires for analysis.

Method of Data Analysis

The data collected were analysed using descriptive statistics of frequencies and percentages and the results presented.

RESULTS

The results of the study are presented as follows:

Table 1: Summary of stable and unstable Personality of Candidates

Variables		Frequency	Percentages
Personality	Stable	2,206	89.9
	Unstable	247	10.1
	Total	**2453**	**100**

Result presented in table 1 indicates that 2,206 (89.9%) candidates manifested stable personality traits, while 247 (10.1%) candidates manifested unstable personality traits of neuroticism and emotional instability.

Table 2: Profiles of Personality traits for Police Candidates

Variables		Frequency	Percentages
Psychoticism	Low	2,233	91.0
	High	220	9.0
	Total	**2,453**	**100**
Extraversion	Low	2,162	88.1
	High	291	11.9
	Total	**2,453**	**100**
Neuroticism	Low	2,026	82.6
	High	427	17.4
	Total	**2,453**	**100**
Lie	Low	2,102	85.7
	High	351	14.3
	Total	**2,453**	**100**

Result presented in table 2 showed 2,233 (91.0%) police candidates exhibited low psychoticism trait-indicating tender-mindedness, while 220 (9.0%) exhibited high psychoticism trait-indicating tough-mindedness; 2,162 (88.1%) police candidates exhibited low extraversion trait-indicating they were introverted and reserved, while 291 (11.9%) exhibited high extraversion trait-indicating they were sociable, outgoing and domineering. Similarly, 2,026 (82.6%) police candidates exhibited low neuroticism trait-indicating they were emotionally stable and self-confident, while 427 (17.4%) exhibited high neurotiscism trait-indicating they were emotionally unstable, anxious and insecure. Lastly, 2,102 (85.7%) police candidates scored low on lie scale while 351 (14.3%) scored high on lie scale indicating a tendency towards social desirability responses or faking of responses.

DISCUSSION

Many studies conducted on Police personality assessment have centered on predicting performance during training. In this present study, the researchers focused on assessing the personality of the candidates seeking admission into the Nigerian Police Academy in order to identify personality traits of the candidates so as to build their profiles and to determine the traits that will enhance the performance of the candidates on training in the Academy. The results and findings of the research are discussed thus:

A total of 2,453 police candidates participated in this study. Out of this

number, 52.5% of the candidates who were assessed for personality manifested unstable personality traits of psychoticism and neuroticism. This implies that more than half of the candidates who manifested emotional instability may experience some challenges while in training. Further break down of the results indicate that 9.0% of the candidates exhibited high psychoticism trait. This finding supports the evidence that comes from the fact that students with high scores on the psychoticism scale tend to think there is nothing wrong with truancy (Jones & Francis, 1995) and to have negative attitudes to school and school-work (Francis & Montgomery, 1993). In this finding, it is clear that police candidates who scored higher on psychoticism trait may likely have more difficulties in their training and even when they are commissioned as Police officers.

Result shows that 11.9% exhibited high extraversion trait. Individuals who score higher on *Extraversion* are ambitious, outgoing, pro-social and communicative. Moreover, Extraversion is a strong predictor for leadership responsibilities and behaviors (Judge, Higgins, Thoresen & Barrick, 1999). Further study by De Raad and Schouwenburg (1996) indicates that higher energy levels and positive attitude of students which are ingredients of extraversion are expected to lead to a desire to learn and understand. Thus, candidates who score higher on extraversion trait are more likely to advance in their career as they have more prospects for further training opportunities.

In addition, result of the study shows that 17.4% of the candidates exhibited high neuroticism trait-indicating they were emotionally unstable, anxious and insecure. This finding implies that candidates identified with neurotic trait of personality might encounter challenges on training or while carrying out their statutory duties of maintaining law and order. This will in turn affect their ability to perform optimally and even when they are commissioned as Police officers. This finding supports the research conducted by Ng, Sorensen and Eby (2005) in which they reported that *neuroticism* hinders effective career management and is associated with low career self-efficacy as it also leads to emotional instability and stress, especially in the work context (Hartman & Betz 2007). Neurotic individuals might avoid the extra demands of Further Education and Training (FET) and supervisors may have less confidence in these individuals to succeed in training. In addition, neuroticism is also believed to affect students' ability by directing their attention away from study and their anxious emotions and self-talk (De Raad & Schouwenburg, 1996), which may also be related to the observation that less-resilient students have lower academic achievement (Hojat, Gonnella & Vogel, 2003).

Finally, result indicates that 14.3% of the candidates scored high on the lie scale. This

personality trait is considered to be a measure of social conformity (Francis, Pearson & Stubbs, 1991). Those who scored high on the scale have the tendency to "fake good" which in actual fact they are not.

Conclusion and Recommendations

The nature of Police work is an intensive job that demands a high level of emotional stability to enable police personnel to perform their duties even in difficult and unsafe situations . Therefore, officers working in different units are required to have stable personality characteristics that can help them discharge their duty effectively. In this study, the personality assessment of Police candidates seeking for admission at Nigerian Police Academy, Kano were examined to determine personality traits that are desired of a Police officer. Consequently, findings of the study indicate that only personality trait of extraversion strongly predicted performance of candidates on training. Candidates who manifested personality traits of psychoticism and neuroticism are more likely to experience emotional instability. The implication of this finding is that the performance of the candidates will be adversely affected while on training in the Academy. Based on these findings, the researchers therefore recommend the following:

1. That candidates with stable and suitable personality profiles seeking admission into police academy should be considered for selection into the degree programme of the Nigerian Police Academy.
2. Candidates with evidence of unstable personality profiles should be considered only with the discretion of the NPA Selection Board.
3. Result of Psychological Assessment should form part of the bases for monitoring the performance of Cadets during training in the Academy.

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PERSONALITY TRAITS, SEX DIFFERENCE, AND PSYCHOLOGICAL DISTRESS AMONG CAREGIVERS OF STROKE PATIENTS AT FEDERAL MEDICAL CENTER, MAKURDI

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Abstract

The study examines personality traits, sex differences and psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi. Survey design and convenience sampling technique were adopted for the study. 378 participants took part in the study and responded to the Big Five Personality Inventory (BFI), and Depression, Anxiety, and Stress Scale (DASS 21) to measure personality traits and psychological distress respectively. Hypotheses were tested using multiple regression analysis and independent t test. The results of the study indicate that, there is a significant joint influence of personality traits on psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi ($R = .610 = R^2 = .372$ ($F(5,391) = 44.109$, $t = 5.631$, p? .05). Independently, agreeableness and conscientiousness negatively and significantly contributed to psychological distress. While, openness to experience, neuroticism, and extraversion positively and significantly contributed to psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi. ($\beta = -.111$, p? .05; $\beta = -.091$, p? .05; $\beta = .181$, p? .05; $\beta = .328$, p? .05; $\beta = .428$, p? .05). The results also indicate that, there is no significant difference between male and female caregivers of stroke patients on psychological distress at Federal Medical Centre Makurdi ($t(376) = .423$, $p > .05$). It was concluded that personality traits influenced psychological distress but, sex difference has no influence on psychological distress. Therefore, it is stated among other recommendations that, clinical psychological services is an important aspect of hospital services that should not be limited to the patients alone but, be extended to the caregivers of patients to help them cope with the stress of caregiving especially for stroke patients in the hospital.

Keywords: Personality traits, Sex difference, Psychological distress, Caregivers

INTRODUCTION

Psychological distress is a term used by psychologists to describe unpleasant feelings or emotions that impact peoples' level of functioning in the society. In other words, it is an unpleasant state or experience of psychological discomfort that interferes with the daily activities and life of individuals going through stressful experiences. Wheaton (2007) defines psychological distress as an emotional disturbance that may impact on the social functioning and day-to-day living of individuals in the society. Mirowsky and Ross (2002) defines psychological distress as a state of emotional suffering that is characterized by symptoms of depression (like loss of interest in everyday activities; sadness; hopelessness, and fatigue among others) and anxiety symptoms (like restlessness; and feeling tense).

Psychological distress could occur as a poor or maladaptive response to a stressful situation when external events or stressors place demands upon people that they are unable to cope with. For example, an individual may struggle to accept that a loved one is dead and as a result, become sad and have trouble getting out of bed, finds it difficult to focus at work thereby, affecting their work performance. People who are psychologically distressed may also lose interest in social activities. Mason, Fauerbach and Haythornthwaite (2010) observed that, students who experience psychological distress may find it hard to focus on their schoolwork or in class, especially if they are experiencing hallucinations or delusions. Therefore, suffices to say that a person who is psychologically distressed might exhibit behaviours characterized by symptoms of mental illness like anxiety, confused emotions, hallucinations, rage, without actually being mentally ill in a medical sense.

Psychological distress affects people in different ways. It affects the way the mind works (for example, poor memory, and short attention span) and the ways the body functions (for example, immune system, and digestion); it can also worsen other medical conditions like blood pressure, and glucose control among others (Taylor, 2009). Psychological distress can also interfere with recovery from burn in many ways, such as making pain and itching feel even worse, reducing burn patient's effort and persistence in participating in rehabilitation therapies and wound care, making communication with burn team members difficult, reducing patient's interest and pleasure in daily activities and disrupting sleep (Smith, Klick, Kozachik, Edwards, Holavanahalli, Wiechman, Blakeney, Lezotte, & Fauerbach, 2008).

Available literature has shown that there are so many stressful situations that could cause psychological distress. King (2011) observed that situations like death of loved ones, divorce, rape, domestic violence,

flooding, wildfire, earthquake, and tsunami. Furthermore, medical conditions like cancer, infertility, mental illness, adverse work and school experiences, as well as loss of job all causes psychological distress. Similarly, Goldberg (2000) observed that major life transitions like starting a new school or a new job, moving to a new environment or graduating from college can be sources of psychological distress if, the individuals cannot cope with the demands of these transitions. People do not react in the same way to stressful situations no matter their exposure, therefore they do not manifest psychological distress in similar ways. The severity of psychological distress manifested by an individual is dependent upon the situation and how it is perceived by the individual.

Since no two individuals experience psychological distress in the same way, it then means that, psychological distress might be a function of individual's personality. Oladimeji (2011) defines personality as the total quality of an individual's behaviour as it is revealed in his habits of thought, of expression, his attitudes and interests, his manner of acting, and his personal philosophy of life. Personality is the unique set of enduring characteristics and patterns of behaviour (including thoughts and emotions) that influence the way a person adjusts to his or her environment (Worchel & Shebilske, 1995). In a simpler term, personality *is* the characteristic ways that people differ from one another.

Personality is made up of traits; identifiable and relatively stable characteristics that set each individual person apart from others. Personality trait is an enduring pattern of perceiving, relating to, and thinking about the environment and oneself that is exhibited in a wide range of important social and personal contexts. According to Kassin (2003) personality traits are habitual patterns of behaviour, thought, and emotion. Traits are relatively stable over time, differ across individuals and influence behaviour.

Proponents of the traits model of personality view personality based on inherited traits and analyzed behaviour from the individualistic perspective. According to trait psychologists, there are a limited number of these dimensions (dimensions like Extraversion, Conscientiousness, Agreeableness, Openness to experience, or Neuroticism), and each individual falls somewhere on each dimension, meaning that they could be low, medium, or high on any specific trait. These personality traits are implicated in behaviours and might influence how humans react to stressful situations. Afshar, Hamidreza, Hassanzadeh-Keshteli, Sharbafchi, Feizi, and Peyman (2015) assessed the prevalence of personality traits and their relation with psychological factors like depression, anxiety, and psychological

distress. The result shows that high levels of neuroticism and low levels of agreeableness and extraversion were associated with being depressed or anxious, or having high psychological distress.

The relationships between psychological distress, pain duration, neuroticism, extraversion, pain severity, and functional impairment were examined by BenDebba, Torgerson, and Long (1997). The results indicated that levels of psychological distress are related to the patients' personalities. Patients who scored high on neuroticism reported higher levels of psychological distress than patients who scored low on this trait.

Similarly, Aaseth, Grande, Leiknes, Benth, Lundqvist, and Russell (2011) explored the relationship between chronic tension-type headache (CTTH) and psychological factors (personality traits and psychological distress) in a population-based sample and to determine the influence of headache frequency and medication days. The results indicated that persons with CTTH had a significantly higher neuroticism score and a significantly higher level of psychological distress than the general population. Headache or medication days per month had no significant influence on the neuroticism and lie scores or the level of psychological distress score. It was concluded that persons with CTTH have a high level of neuroticism and psychological distress.

Sex difference is another important factor found to be implicated in psychological distress. Sex refers to the properties of a person that determine his or her classification as male or female (King, 2011). Scientists use the physical structure of the human bodies to classify people as either male or female. Abbo, Ekblad, Waako, Okello, Muhwezi, and Musisi (2008) observed that sex difference is implicated in the feeling of psychological distress. In their study of psychological distress and associated factors among caregivers in Jinja and Iganga district, Eastern Uganda found that of the 400 caregivers interviewed, 70% of male were more psychologically distressed than the female counterpart.

Matud, Bethencourt, and Ibanez (2014) examined gender differences in psychological distress by analyzing the relevance of stress, coping styles, social support and the time use with a sample of 1,337 men and 1,251 women from the Spanish general population. The result indicated that women had more psychological distress than men. Although, psychological distress in the women and men groups have some common correlates such as more stress, more emotional and less rational coping and social support. However, the researchers found some gender differences among which work role dissatisfaction was more associated with distress in the men than in the women group. In addition, women's distress was

associated with more daily time devoted to childcare and less to activities they enjoy, and men's distress was associated with more time devoted to housework and less to physical exercise. The researchers concluded that social roles traditionally attributed to women and men and the differences in the use of time that such roles entail are relevant in gender differences in psychological distress.

In another study of sex differences on psychological distress, Cleary and Mechanic (1983) examined the influence of various factors, including role responsibilities and satisfaction, on depressive mood. Various competing hypotheses concerning the factors related to depression are explored using data from a study of psychological distress in a representative sample of a Midwestern community. Although women reported more distress than men, the largest difference among married people was between employed married men and housewives. Employed married women experienced slightly less distress than housewives, but having minor children in the household was especially stressful for these women and counteracted the advantage of employment. The effects of children in the household on distress were strongest among working women with lower family incomes. These data support the hypothesis that the strain of working and doing the majority of the work associated with raising children increases distress among married women.

In Nigeria, family members and friends both male and female are saddled with the responsibility of taking care of their patients both in public and private hospitals. In many Nigerian hospital settings, it is mandatory for family members of a sick person to provide a caregiver that will be responsible for the day to day needs of the sick person before the sick person is admitted into the hospital ward. This caregiving responsibility especially for stroke patients causes a lot of stress to so many due to the nature of the illness (stroke). The stress experienced by caregivers of stroke patients is mostly due to the general stress of caring for stroke patients who in most cases, are bedridden and cannot do anything by themselves.

The caregivers of stroke patients often times are responsible for wheeling patients on wheel chairs and/or stretchers to radiology unit and laboratory for x-rays, scanning and laboratory investigations especially, where there are no porters vested with this responsibility. The caregivers also feed the patients, bath and clean the patients when the patients soiled themselves. These could act as serious sources of stress to the caregivers of stroke patients.

The stress of caregiving for stroke patients is heightened especially when the caregivers have other responsibilities like, caring for the general well-being of other

family members as well as, meeting up with occupational responsibilities; coupled with environmental factors like bad stench or odour in the hospital, lack of good sanitary system, unavailability of basic amenities/facilities like water for use in the hospital, going outside the hospital to buy drugs/medications when such drugs/medications are not available within the hospital, and sleeping on chair or bare floors among others. This is made worse when the caregivers lack resources to properly care for the stroke patients, and/or see their loved ones in a helpless situation and has nothing to do to salvage the situation, as well as see other stroke patients die in the ward making them apprehensive about the outcome of their patients conditions.

In view of the above, many of the caregivers of stroke patients see the act of caring for stroke patients as challenging while, other do not. Therefore, the researchers became interested in knowing why some see the act as challenging while others do not. Available literature shows that personality traits and sex differences are implicated in psychological distress. Therefore, based on that, the researchers sought to find out the influence of personality traits and sex differences on psychological distress among the caregivers of stroke patients at Federal Medical Centre Makurdi.

Aim and Objectives of the Study

The aim of this research basically is to ascertain the influence of personality traits and sex differences on psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi.

The objectives include:

i. To ascertain the influence of personality traits on psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi.
ii. To examine if there are sex differences on psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi.

Hypotheses

i. There will be a significant influence of personality traits on psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi.
ii. Sex differences will significantly influence psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi.

METHOD

Design

The study adopted survey research design. This research design was adopted because there were no manipulations of the research variables; the participants only responded to the items on the instruments as it applied to them. Convenience sampling technique was used to sample participants for the

study. The reason for choosing this sampling technique was to allow participants who were caregivers of stroke patients at Federal Medical Centre Makurdi to volunteer their participation in the study.

Participants

The participants were strictly caregivers of stroke patients on admission at Federal Medical Centre Makurdi irrespective of the nature or type of stroke. They were people who had stayed for at least two weeks in the hospital caring for the stroke patients. Three hundred and seventy-eight (378) caregivers participated in the study and they include both male and female caregivers of stroke patients on admission. Their age ranged between 18 and 60 years; 18-25 year old constitutes 51% and 26 above constitutes 49% of the participants. 193 (51%) were males while 185 (49%) were females. 76 (20%) were of the high income class, 165 (43%) were of the average income class while, 137 (36%) of the participants were of the low income class. 245 (69%) were Christians, 99 (26%) were Muslims, and 33 (9%) practice traditional religion respectively.

Instruments

The instruments used for data collection include the Big Five Personality Inventory (BFI), and Depression, Anxiety, and Stress Scale (DASS).

The Big Five Personality Inventory (BFI) is a 44-item inventory developed by John, Donahue and Kentle (1991) to measure personality from a five-dimensional perspective. The five dimensions or subscales of BFI are:

a. Extraversion: High energy and activity level, dominance, sociability, expressiveness, and positive emotions.
b. Agreeableness: Prosocial orientation, altruism, tender mindedness, trust, and modesty.
c. Conscientiousness: Impulse control, task orientation, goal directedness.
d. Neuroticism: Anxiety, sadness, irritability, and nervous tension.
e. Openness: It exemplifies the breadth, depth, and complexity of an individual's mental and experiential life.

John *et al*. (1991) provided the original psychometric properties for American samples while, Umeh (2004) provided the properties for Nigerian samples. The coefficients of reliability provided by John *et al*. (1991) are .80 and a three month test-retest of .85. BFI has mean convergent validity coefficients of .75 and .85 with the Big Five Instruments authored by Costa & McCrae (1992) and Goldberg (1992) respectively. The divergent validity coefficients obtained by Umeh (2004) with University Maladjustment Scale (Kleinmuntz, 1961) are Extroversion .05, Agreeableness .13, Conscientiousness .11, Neuroticism .39, Openness .-24.

Depression, Anxiety, and Stress Scales – 21 (DASS-21) is a set of three self-report scale developed by Lovibond and Lovibond (1995) to measure the negative emotional states of depression, anxiety, and stress. The DASS-21 was constructed not merely as another set of scales to measure conventionally defined emotional states, but to further the process of defining, understanding, and measuring the ubiquitous and clinically significant emotional states usually described as depression, anxiety and stress.

Each of the three DASS-21 scales contains 7 items, divided into subscales with similar contents. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty in relaxing, nervous arousal, and been easily upset/agitated, irritable/over-reactive, and impatient.

Procedure for Administration

Before the instruments were administered, the ethical principles of psychological research with human participants were strictly considered and adhered. The consent of the caregivers was sought and granted after detailed explanations of the purpose of the study; the confidentiality of their responses was also guaranteed. They were made to understand that, they have the right to discontinue, decline or refuse to participate or respond to the instruments anytime they feel like before the completion of their responses to the instruments. The instruments were administered to the participants individually by the researchers and other research assistants or confederates engaged to assist in the administration of the instruments. The research assistants were engaged after proper training on how to administer the instruments.

The instruments were administered and collected within 48 hours of the administration since there is no fixed time limit for the administration and collection of the instruments. The instructions on the instruments were simple and straight-forward for the respondents to understand what they were expected to do. The researchers provide answers and explanations to the respondents on questions and issues that arose from the instruments.

Data Analysis

The data were analyzed using inferential statistics. The researcher used independent t-test to test the sex differences in psychological distress, and Multiple Regression Analysis to test the influence of personality traits on psychological distress.

RESULTS

Hypothesis one states that personality traits will significantly predict psychological distress among caregivers of stroke patients. This hypothesis was tested using Multiple Regression Analysis and the results are tabulated and interpreted as shown in Table 1.

Table 1: Multiple Regression Analysis showing the influence of personality traits on psychological distress among caregivers of stroke patients

Variables	***R***	***R^2***	***F***	*ß*	***t***	***Sig***
Constant	.610	.372	44.109		5.631	.000
Agreeableness				-.111	-2.65	.008
Openness				.181	4.14	.000
Neuroticism				.328	7.55	.000
Extraversion				.428	10.25	.000
Conscientiousness				-.091	-2.16	.032

Criterion Variable: Psychological Distress

The results presented in table 1 showed that there was a significant joint influence of personality traits on psychological distress among caregivers of stroke patients (R = .610 = R^2 = .372 (F (5, 391) = 44.109, t = 5.631, p< .05). This means that all the five dimensions of personality jointly contributed 37.2% variation in psychological distress. With regards to the individual dimensions of personality traits, the results clearly showed that agreeableness significantly and negatively related to psychological distress (β= -.111, p<.05). This means that caregivers who are high on agreeableness are less likely to suffer psychological distress. Openness to experience on the other hand made a significant positive contribution to psychological distress among caregivers (β = .181, p <.05). This means that caregivers predominantly open to experience are likely to suffer psychological distress. The third aspect of personality trait which is neuroticism significantly made strong unique positive contribution to psychological distress among caregivers (β = .328, p<.05). This implies that the higher the level of neuroticism, the greater the chances of suffering from psychological distress. Similarly, extraversion made a unique positive contribution to psychological distress among caregivers (β = .428, p<.05). This implies that extraverted caregivers are likely to suffer psychological distress. Finally, conscientiousness made a unique weak negative contribution to psychological distress (β = -.091, p<.05). This means that conscientious caregivers are less likely to suffer psychological distress. Therefore, the hypothesis that

personality traits will predict psychological distress has been confirmed.

Hypothesis two states that there will be a significant difference between male and female caregivers on psychological distress. This hypothesis was tested using independent t-test and the result is tabulated and interpreted as shown in table 2.

Table 2: Independent t test showing difference between male and female caregivers of stroke patients on psychological distress.

	Sex	*N*	Mean	*SD*	*df*	*t*	*Sig*
Psychological Distress	Male	193	11.14	1.78	376	.423	.673
	Female	185	11.06	1.66			

The result presented in Table 2 indicates that there was no significant difference between male and female caregivers on psychological distress (t (376) = .423, p >.05). This means that both male and female caregivers of stroke patients suffer almost same level of psychological distress. It therefore means that gender is not a likely determinant of psychological distress among caregivers of stroke patients. Thus, the research hypothesis has been rejected and the null hypothesis accepted for lack of statistical support.

DISCUSSION

This study examined the influence of personality traits and sex differences on psychological distress among caregivers of stroke patients in Makurdi. With regards to this, two hypotheses were formulated and tested. Hypothesis one, which stated that there will be a significant influence of personality traits on psychological distress among caregivers of stroke patients, was tested and confirmed. This indicates that there is a significant influence of personality traits on psychological distress among caregivers of stroke patients. This study tallies with a study by Afshar *et al*., (2015) on the prevalence of personality traits and their relation with psychological factors in the general population. The researchers found that, in depressed and anxious subjects and subjects with high psychological distress, the score of neuroticism was higher, but the scores of other factors were significantly lower. The researchers concluded that, high levels of neuroticism and low levels of agreeableness and extraversion were associated with being depressed or anxious, or having high psychological distress. This implies that these personality traits have a significant influence on psychological distress experienced by the general population.

The result of a related study of the relationship between chronic tension-type

headache (CTTH) and personality factors (personality traits and psychological distress) by Aaseth *et al*., (2011) also support the finding of this study. The researchers found that those who had CTTH scored higher on neuroticism and psychological distress than the general population. This implies that, personality trait (neuroticism) significantly influence the psychological distress in the participants through the expression of CTTH. The finding of this study and the findings of other studies on personality traits and psychological distress reported here are necessary and are pointing to the fact that, personality traits irrespective of the traits whether neuroticism, extroversion, agreeableness, openness to experience, and conscientiousness each has its own contributions to psychological distress especially, when caring for patients with stroke in the hospital.

It was also hypothesized that there will be a significant difference between male and female caregivers on psychological distress. The hypothesis was tested and the result indicates no significant difference between male and female caregivers of stroke patients on psychological distress ($t(376) = .423$, $p > .05$). This means that, male and female caregivers of stroke patients experience psychological distress in similar ways. This finding, contradicts the finding of the study done by Matud *et al*., (2014), who examined gender differences in psychological distress by analyzing stress, coping styles, social support and the time use found that women had more psychological distress than men. Nevertheless, the researchers observed that, there existed some similar characteristics in the symptoms of psychological distress experienced by the two groups. These include more emotional stress, less rational coping, as well as perceived lack of social support.

However, the researchers cited reasons that may have accounted for this gender differences in psychological distress and concluded that, social roles traditionally attributed to women and men and the differences in the use of time that such roles entail are relevant in gender differences in psychological distress. However, in this study, the responsibility of caregiving for stroke patients was performed by both the male and female participants and they were all exposed to similar stress of caregiving for their patients without, any specific social role responsibility based on gender. Therefore, this may have accounted for why both the male and female caregivers have experienced psychological distress in similar ways.

In correlating the result of this hypothesis to the study of sex differences on psychological distress by Cleary and Mechanic (1983) who examined the influence of various factors, including role responsibilities and satisfaction, on depressive mood also found gender

differences in psychological distress. This means that, the results of their research contradicted the finding of this study on sex differences and psychological distress. The researchers also noted that, women reported more distress than men. However, the largest difference among married people was between employed married men and housewives. In this study of psychological distress among caregivers of stroke patients, both males and females who participated in the study were people who were meaningfully engaged and married but, left other things such as work, businesses as well as their family to care for their patients in the hospital. These could also serve as sources of worry and stress and, when combined with the responsibilities of caregiving to stroke patients could lead to psychological distress. This also may have accounted for why they experienced psychological distress in similar ways.

Conclusion/ Recommendations

The study examined the influence of personality traits and sex differences on psychological distress among caregivers of stroke patients at Federal Medical Centre Makurdi. The results of the study indicated that personality traits of caregivers are implicated in psychological distress experienced by the caregivers of stroke patients in the hospital. This imply that the personality of caregivers are factors that contributed to the level of psychological distress experienced by caregivers when taking care of their ill loved ones in the hospital. Meanwhile, the result of the second hypothesis indicates that there existed no sex differences on psychological distress experienced by the caregivers of stroke patients when taking care of their patients in the hospital. This implies that both sexes caring for stroke patients all experienced psychological distress in similar ways.

With regards to the findings of this study, the researchers therefore recommended that clinical psychologists working in the hospitals providing psychological interventions for stroke patients, should take cognizance of the fact that personality traits have significant influence on the level of psychological distress experienced by caregivers of stroke patients, and as such, make adequate arraignments to include the caregivers of these stroke patients in their interventions to alleviate them of the psychological distress experienced while taking care of their loved ones with stroke in the hospital.

It was also recommended that the caregivers of stroke patients in the hospital should seek psychological help when they become distress when taking care of their loved ones with stroke in the hospital. This would be a step in the right direction towards maintaining good health and taking good care of their loved ones with stroke in the hospital.

The management of Federal Medical Centre' Makurdi and other hospitals in Makurdi and Nigeria, should as a matter of necessity improve their services to cover day-to-day nursing care for all in-patients in line with global best practices. This will help to prevent family members from staying in the hospital and taking care of their patient as well as the stress of caregiving. It will also help relatives of patients to attend to other important things like, their job that suffers when caring for their patients in the hospital, as well as work to raise money to pay the hospital bill of their patients.

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APPLIED CLINICAL PSYCHOLOGY: CLERKING/HISTORY TAKING AS A VERITABLE TOOL

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Abstract
Clinical internship is a veritable tool in exposing and training prospective clinical psychologists in practical issues and relevant skills. In a developing country such as Nigeria where the role of a clinical psychologist has not been adequately understood by the generality of people, practical exposures of this intensive clinical training will help to build in the interns the needed skills and expertise not only to talk as an expert, but also to help draw a clear line of demarcation between quacks and professional clinical psychologists. In this clinical report, applied clinical psychology is demonstrated as, five (5) patients with different disorders clerking/history taking is being reported. Also, administration of relevant and needed tools to help provide adequate explanation for their current episodes was documented.

INTRODUCTION

Neuropsychiatric institutions anywhere in the world do not only help alleviate and lessen mental distress in patients across different strata of the society including Nigeria (Ogundipe, 2016), but they are also institutions where practical skills are acquired as well as practical experiences are gained. Clinical Psychology is basically concerned with the formulation of patients' problems and the offer of counselling and psychological therapy to the patient in question, and to their relatives and personnel (Roberts & Ilardi, 2003).

In Addition to the duties of the institution, multidisciplinary work, small group discussion, psychological report writing, psychological test administration and psychological interventions using psychotherapy across different schools of thought becomes a necessity in psychiatric institutions (Berger, 1991; Leff, Trieman, Knapp, & Hallam, 2000; Burns, 2004). Clinical psychology professionals are part of the members that make up the mental health team that plans treatment and manages patients; against this backdrop, it is only appropriate that anyone who desires to be a clinical psychologist be exposed to practical experience on the field in the attempt to bridge theory with practice (Goldstein, & McNeil, 2004).

Brief History of Neuropsychiatric Hospital (NPH) Aro, Abeokuta

Neuropsychiatric Hospital (NPH) Aro is a federal government mental health institution situated in Aro, Abeokuta, Ogun State. The institution is one of the psychiatric hospitals in Nigeria amongst others. It was established in the year 1944, and situated in the state's capital of Ogun State, along the Lagos-Abeokuta express way. It has seasoned psychiatrists consultants, senior psychiatrists' registrars, psychiatrists' registrars and resident doctors in psychiatry training. It also has 6 clinical psychologists *(as at the time of writing this report)*, and a sizeable number of psychiatric nurses, social workers, occupational therapists, pharmacists, among others *(www.neuroaro.com)*.

The hospital's administrative team is headed by the Provost/Medical Director. The hospital also has a management board which is under the supervision of the Federal Ministry of Health. For better, efficient and effective administration, the hospital has several directorates viz: Clinical Services, Research and Training, Clinical Psychology, Psychiatric Nursing, Pharmacy, Administration, Finance, Community Mental Health, Special Services, among others; which aid the organization to involve in qualitative mental health care (www.mhinnovation.net).

Personal Perspective

Furthermore, exposure to an institution such as this for an internship programme in Clinical Psychology is indeed a privilege

and a rare one. For the three month duration this programme lasted, I sincerely have profited in no small way. From the interactions with members of staff cut-across various departments to interactions with patients in the wards and residents in DATER house, from reading about peculiar psychopathologies to seeing them manifest in patients, the experience has been worthwhile. Theory has indeed blended with practical knowledge, and has increased and an appreciable progress has been made. One can now understand the biopsychosocial model of etiology, formulation and treatment of psychopathologies using the '5Ps' according to the Cognitive Behavioural Model.

Most of the Psychological services required by patients (both in and out-patients) are provided by the Psychology Unit of the hospital. Such services are needed for the full rehabilitation of patients, and equipping of non-patients who call for this Unit's services for knowledge and skills that will make them manage their stressors so that such will not affect their day-to-day functioning. Psychology unit assesses and probes through clerking/history taking and psychological testing of both patients and non-patients, to find out what the factors are that presents, predisposes, precipitates, and perpetuates the psychological disturbances, and through this alongside with other relevant information obtained from significant others (family members, friends, employer, etc.), a diagnoses will be made using diagnostic manuals such as the International Classification of Diseases, Tenth edition (ICD-10) approved by World Health, (1992) or Diagnostic and Statistical Manual, Fifth Edition, (DSM-5) by American Psychiatric Association (2013). On the bases of this diagnosis and relevant information elicited, treatment plan will be made which will now be followed by actual treatment.

As a clinical intern in the Psychological unit, these three months have not only been productive and beneficial, it has also been challenging intellectually indeed, an experience that has made an indelible impact on my desire to pursue even more vigorously in the clinical line.

Clerking (History Taking)

This is literally a means of data collection from patients with respect to histories that cut across significant domains of life. It is a major means of clinical assessment that helps to inform formulation, make diagnoses and plan treatment. Within these months/periods, I was able to clerk more than 10 patients *(which is the basic standard for the certification)* with different disorders and administer relevant and needed tools to help provide adequate explanation for the current episode. Details of clerking carried out can be found in the APPENDIX of this report.

Appendix
Clerking (History Taking)
CASE 1

Bio-data

Name:	E.O
Gender:	Male
Age:	32 Years
Occupation:	Clerical Staff of a Known Hospital
Tribe	Yoruba
Marital Status:	Single
State Of Origin:	Lagos State
Family	Polygamous
Religion	Christianity
Address:	Lagos.
Source of Referral**:**	Place of Work (Hospital)
Source of Information:	Client and Case File

Presenting complaint
Patient was presented with the following complaint:
Two (2) months of verbal and physical aggression toward people around; Two (2) months hostility and aimless wandering round the street; Undue irritability for three months; Stripping self-naked in the public for one (1) month especially after alcohol intake; Alcohol use for more than 18 years; Cigarette use for 18 years; Cannabis use for 18 years;

History of presenting complaint
The patient was apparently well until two month ago, when he was presented with a complaint that he was not being friendly but rather verbally and physically aggressive toward people around him, including his co-workers at work, which had lasted for two months, before the admission, he would also strip himself naked in the public places, saying that he would be much more comfortable especially after taking alcohol (palm wine or beer) which has lasted for two months. He does spend all his salary on substance (alcohol, cigarette and cannabis) and even go on borrowing before the month ends which he admitted that it was introduced to back in 1997 (SS2, when he was 14yrs old by his friends). He reported undue irritability after taking cannabis which has also lasted for three months and aimless wandering for four months especially after taking alcohol and cannabis. He claimed to have started substance use with palm wine and beers right in secondary school days (18yrs ago) which he started with one cup of palm wine or beer per day for a week and later graduated to two and three weeks later until the admission, the patient takes six bottles of alcohol (palm wine & beers per day (2 in the morning,2 in the afternoon and 2 the in evening), at a sit he always show urge to the use of alcohol even while at work, he drinks and sleeps off on the job.

He also reported that he started with one (1) stick of cigarette per day and progress to two, three and now six sticks daily, he further reported that his cannabis use started with small puff daily, then move to one wrap

per day and later increase to three wraps daily prior before the admission. He said he experienced dizziness, restlessness, when try to stop substance or when he had not taking substance for a day and he reported that he spent between #2,000 and #5,500 daily.

Personal history

The patient was born 32yrs ago, at the general hospital, Lagos, he reported his pregnancy, delivery and developmental mile stone was uneventful, also reported that he was the first born of the family, the patient grew up with his parent (father and mother) but more closer to his mother than any other in the family to the fact she always buy toys and new wears for him while his Father was very strict and didn't stay at home for long but always engrossed in His work.

Primary School: The patient attended GN Primary School Lagos, from 1986-1992 at age three (3) in which he was an average pupil with fair performance which rated between 5th and 10th position in the class of thirty (30). He had a cordial relationship with his colleague and teachers then.

Secondary School: He reported that he first attended JSS one in St F. Secondary School, Lagos, (private secondary school) at age 10years old immediately when he left primary school in 1993 and move to EG School (public secondary school) to attend JSS2-SS3 due to high school fees at 11 years old. While in this new school, his perform becomes better and ranged between 1st and 3rd in a class of forty and rated best student between JSS 2 to SS1. He became one of the school labour prefect while in ss2 to ss3 due to his charisma, brilliancy and popularity, he involves in social activities. Also, he finished with eight (8) credits in NECO.

University Education: The patient proceeded to study computer science in University (1999/2000) at 17years old when he claimed to have average scores of 205 in JAMB and 50 in Post UTME and was given admission. While in university, he joined K. Social Club as introduced to him by his friend (called T.), and he always join them to take palm wine, he could still remembered vividly that his some of his best friends at the clubs were T, W and O. He reported that a year later (at 200level, 2001) the school authority revealed the names of fake admitted student and other related offences and he was found among and expelled from school due to wrong and fake admission which he was earlier ignorant of.

Having being expelled from school, the patient claimed that he came across one of his old best friend back in secondary school named F, which he later impregnate and married out of wedlock. They started staying together and the lady gave birth to a boy called B (13yrs old now). Both separated 3yrs ago due to mother-in-law

disagreement (tribal differences, the lady is from South-western part of the country and he's from Ekiti State though leaved in Lagos) as claimed by the patient. He reported to impregnate another lady that gave birth to him (another baby boy called D, 2yrs old). Although, the lady and the baby stayed with the lady's parent.

He claimed to have done many jobs that ranges from phone engineering in Lagos (2001-2004) immediately he was expelled from school, he gained between #5,000-#7,000 daily but not consistence from phone repairing then, move to bus conductor (2004-2011) where he earn like #60,000 cumulatively monthly. Then he got clerical job at the Known Hospital just of recent (2013) where they pay him more than previous earning (he didn't disclose the salary) and still work there before the admission. He claimed in addition, that he had stopped going to his father's house since 3yrs ago due to spiritual warning by Prophets being a polygamous family.

Family history

Mr E.F 32yrs male single, employed, Christian and polygamous family of two wives, with five siblings (2males and 3 females including the patient). Father: Pa. E.D, 70yrs, Christian, a retired civil servant (head master), native of Ij Land, from Yoruba tribe, lived in Lagos and an elder in FC tabernacle. He is of the history of alcohol use, he is an occasional user of alcohol, he drinks palm wine only during leisure time with three to five cups at a sit, and this has being on for more than 30 yrs. though no dependent, no tolerant, no withdrawal syndrome and no history of mental illness.

Mother: Mrs E.O, 52yrs, Christian, first wife, trader of food stuff, native of Lagos, lives in Lagos. No history of mental illness, no history of substance use, and no history of medical illness. He reported that he like his mum most.

Step Mother: Mrs E.S, 49yrs, Christian, trader of provision, native of and lives in Lagos, she has no history of substance use, but there is a history of mental illness (one episode of schizophrenia and an outpatient of Psychiatric hospital).

Blood Sister: Miss E.B, 29yrs old, Christian, single, graduated from Agricultural Department of Lagos State University, Lagos, unemployed, living in Lagos outside the family house with no history of mental illness, no history of substance use, and no history of medical illness.

Step Brother: Mr E.C 30yrs Christian, married with 1 child (male) in Ikeja Lagos, business man, with no history of mental illness, no history of medical illness and with history of substance use (quantity not ascertain).

Step Sister 1: Miss E.P, 27yrs, single,

student of T. University, 300level political science, no history of substance use, no history of mental illness, and no history of medical illness.

Step Sister 2: Miss E.G 25yrs, single, student of LP College, 200level studying public admin. No history of substance use, no history of mental illness and no history of medical illness.

The patient reported that he had no cordial relationship with the step mum and siblings before the admission due to their attitude and though he might later change

Medical history: nil
Psychiatry history: nil
Forensic history: nil

Drug history

Mr E.F reported that he vividly remembered that he started substance use in secondary school (E. Grammar School, Mushin Lagos, in 1994 at age 11) after he was being transferred from St F. secondary school Idimu, Lagos, he claimed that this little change of academic environment brought a great change in his life as pertaining his behaviour and had left an indelible mark in his life. He reported the new school brought new friends into his life as such he started having friends including the opposite sex, this progressed till SS1 (2yrs later, 1996) when he started taking alcohol (palm wine) after the school hour before heading home, around 3pm, he started with small quantity (1 cup per day) later progressed to three cups and so on. He claimed other alcohol that serves as alternative then was beer.

He further claimed that cigarette smoking started in secondary school also, in 1997 (SS 2); he started with experimentation through friends with one puff per day after being made as labour prefect, this he reported made him to "feel among and courageous" to face the public and fellow students; the amount continued to increase gradually to 1 stick daily and move to 2 and 3 sticks daily even before the end of the second term (4mths). He reported that, then he neither felt dizzy nor dull when he didn't take cigarette, but this had changed now as withdrawal syndrome do manifest.

He proceeded to cannabis use in SS 3 (1998) due to peer influence, he started with one wrap per day early in the morning before the school assembly with his friends as he claimed and became high and energised nearly throughout the day to perform the role of labour prefect in school, though as he claimed he is not consistent in taking cannabis, the 2 wraps progressed to 3 wraps within two months (by the end of the term) and had been since then. He reported having felt slept off after taking alcohol, smoke cannabis at work one day he was brought to NPH Lantoro for treatment and rehabilitation.

Psychosexual history

The patient reported he had his first sexual experience while in SS 2 (1997) at 14yrs with F. (13yrs old) in JSS 3. Since then, he has being engaging in sex in a conventional style of penetration through virginal with opposite sex, though, sometimes different styles when using contraceptive.

He reported that his first girlfriend which later gave birth to his first child made him a "man" and since then he had being patronizing sex workers around their house anytime he felt like, he takes alcohol and substance sometime before having sex and most of the times with the sex workers. He performed male role while he was growing up as he always being told by his father "be a man and be courageous" for you are the first born of the family. He claimed he didn't have any erotic feelings toward objects or animals, he did not report any sexual dysfunction and Sexual Transmitted Diseases anytime in life.

Premorbid personality

Mr. E.F, reported to be jovial, social; loves reggae music when drinking, religious (as he was the drummer of their church) neat hardworking prior to his hospitalization.

Present living circumstances

Patient lives in a single room in Lagos State, around his working place.

Mental state examination

The MMSE was done on 17th of August, between 12:00pm to 2:00pm

He appears well groomed, with good body hygiene, attentive, well-coordinated, maintain eye contacts, No motor retardation or abnormal psychomotor activity; He was apparently jovial, focused, no hostility as he's ready to express his thought, he had the ability to follow commands, Cooperative, alert and vigilant, no lethargic; Orientation to time, days, week and year were alright; Speech and language, amount, spontaneity, rate, volume and tone where alright, no poverty of speech or monotone, Normal mood and feeling also, affect proves no anxiousness and no hostility, Judgments and insight are good; Suicidal ideation was also assessed; he was of high self-worth and good quality of life.

CASE 2

Bio-data

Name:	A.O
Age:	32
D.O.B:	2nd May, 1983
Marital Status:	Single
Gender:	Male
State Of Origin:	Ekiti
Occupation:	Unemployed
Religion:	Christianity
Family	Monogamous
Tribe:	Yoruba
Address:	Berger/Ojodu Lagos

Referral Source: Mental Health Team
Source of Information: Client And Case file

Presenting complaint

Patient was presented with the following complaints:

Aimless wandering, neglect of personal hygiene for over two weeks; verbal and physical aggression which has lasted for two weeks; Two weeks of talking to self; chronic leg ulcer at lower limb which has lasted four weeks; Drink Alcohol and substance use including smoking Cannabis, cigarette which has lasted for fifteen (15) years.

History of presenting complaints

Patient was apparently well until about two weeks prior to admission into the hospital on the 7th of March. When he was noticed by his landlord and people around him including his neighbour to be verbally and physically aggressive, neglecting of personal hygiene. He would reply with aggression anytime they are trying to deliberate on sensitive issues with landlord or neighbour, He would start talking to self after smoking Cannabis and he would start fighting after taking alcohol (beer) and disturb is neighbour with the smoke of the cigarette sometimes early in morning or late in the night. Neglect of sour wound in the lower limb for more than four weeks without treatment which had turned to ulcer and started smelling offensively before admission. Most of the presenting complaints especially the alcohol drinking, cigarette smoking and substance use started on Ikeja high school in 1998 at age 15 due to peer influence as he said. He reported usually going to a cafeteria to eat and watch television when he started noticing people in a nearby shop coming in and exchanging money for something he could not pinpoint as at that time. So he decided to also venture into whatever business it is they were transacting and he found himself always going back there to exchange money with substances especially Cannabis.

Personal history

Pregnancy, labour and delivery were reported to be uneventful. Patient could not give detailed information about his developmental milestones but recalled that he did not suffer any major medical illness apart, he reported he loves his Mum more in the family just because while was growing his by wears and toys.

Educational history

Patient started his primary school education at the M & K Academy Ojodu, Lagos in 1986 at age 3 and graduated in 1994 at age 11 with average performance. He reported he had a close rapport with his classmates and teachers.

He was admitted into I.H. school in 1995 at age 12 where he was popular and social he completed his secondary school education with a remarkable result.

Patient was admitted into Y. Tech Lagos as Elect/Elect student in 2003 at age 20. He joined Club called "Bishop" with the goal to organized birthday and social parties which he was participatory member, during those periods he was in sexual relationship which continued even after he had finished with average result in his two years ND program.

He moved to E.S. University to study Elect/Elect in 2004 but expelled in 300level due to his political group involvement and poor performance both in the school and outside during the time of SUG election and Governorship Election in E. State of Nigeria in 2007.

Occupation history

He reported he did severer odd jobs before his admission into Y. Tech; such jobs include as site labourer, pure water business with income less than #5000 daily around 2001 to 2003 at age 18.

Also, after his ND program he searched for job for a long time but could not find he said he was disappointed and decided to learn how to repair Air Conditioning during those period his level of alcohol drinking, cigarette smoking and substance use increased from being small quantity to average.

Past psychiatry history

Patient reported having had four episodes of mental illness which has resulted into admission in different hospitals, first admission was for mental illness due to substance use, in 2009 and duration of admission was for two months. Patient was discharged based on recovery.

The second episode resulted in his admission into NPH in 2009. He was on admission for 2 months and this was also due to substance abuse, six years ago.

Third admission was in Y. Teaching Hospital four years ago diagnosed of MBD and admitted into Drug Unit in 2011.This 4th admission was due to the presenting complain above, the current one is the fourth episode in Neuropsychiatry hospital, for drug rehabilitation.

Family history

Patient is from a monogamous family consisting of a father and a wife with 7 children (2 females and 5 males including the patient). Father Pa. A.J is a 75 year old man, with formal education, retired NEPA staff. The mother Mrs. A H is the only wife of the father and she is about 60 years of age business woman who trades in food stuff. She has no formal education, both are Christians without history of substance use, medical illness or psychiatric illness.

First born of the family, Mr. A.D male 45yrs old, Christian married with three children living in Lagos, neither history of substance use nor psychiatry illness.

Second born is Mr. A.B male, 40yrs old married with two children, Christian

employed in Lagos with no history of substance use or medical illness.

Third born Mrs. B.V female 38yrs, married Christian, trader of provision, lives in Lagos with husband and two children, she has no history substance use.

Fourth born, Mrs E.B, 36yrs old, married to Muslim man with one child, business woman in Lagos without history of substance use and psychiatry illness.

Fifth born: Mr A.C 34yrs Christian, married with 1 child (male) in Ikeja Lagos, business man, with no history of mental illness, no history of medical illness and with history of alcohol (occasionally drinker of Beer),

Sixth born: the Patient

Seventh born: Mr A.G 29yrs, single, student of E.K. University 400 level studying political science. history of substance use, no history of mental illness and no history of medical illness.

The patient reported that he had cordial relationship with his sister, the third born Mrs B. V due to her attitude, advise and encouragement.

Forensic history

Patient claimed to had issues with police when he wanted to be carried down for the admission and also on two occasions when he was being arrested on drug related issues and being bailed out after 2 days by his father.

Medical history

The patient reported to have visited hospital occasionally on malaria related illness.

Drug history

Patient started taking alcohol back in secondary school SS class due to peer influence, he started with one bottle of beer per day and graduated within two days to four-five bottles, before the admission he reported he takes seven (7) bottles of beer on a sit. This then proceeded to cigarette smoking also in secondary school then, he said he started cigarette with experimentation, with just one (1) stick per day until in three months when he graduated to ten (10) sticks daily before the admission he claimed he takes 15 sticks daily. In addition, the patient started smoking cannabis in 2004 while he was a ND 1, he started with 2 wraps per day, he reported that he felt refreshed, and energized when started, he later developed withdrawer syndromes such as dizziness, excessive sweating and dry troat when he had not taken substance in a day, he progressed to three to four wraps a day within two weeks, and he reported taken six (6) wraps daily before the admission, both in the morning and night that #40 to 50# per wrap . He reported that his pocket money was the major source of finance then while in secondary school and before his admission, his salary was the source of income for his

substance use.

Psychosexual history
Patient attained the age of puberty at 15yrs old, he had his first sexual experience at age 21yrs while in Y. Tech with a lady called B. He did make use of contraceptives when having sex with ladies, he reported that he patronized commercial sex workers and engaged in different styles of sexual intercourse such as oral and anus. He reported no STDs and claimed he did take alcohol when having sex. He knew that he was a male with heterosexual orientation and masculine in his gender role. He claimed that recently after his first admission (six years ago) his sexual experiences was no more pleasurable.

Presenting living circumstance
Patient was staying alone in one room apartment in Ojudu Lagos before his hospital admission.

Premorbid personality
Patient claimed to be jovial, social, calm, not religious, likes watching television, playing draft game.

Mental status examination (as at 25th of August, between 12:00pm to 2:00pm)

Appearance: Patient was neatly and appropriately dressed

Speech: His speech was of normal tone, relevant, audible and coherent

Mood: His mood was happy

Affect: Displayed a good affect

Thought process: No flight of ideas, derailment or circumstantiality. He is in touch with reality

Thought content: He reported no hallucinatory experiences and denied delusional disorder.

Perception: He has appropriate perception of stimuli.

Cognition: Oriented to time, place and person. Has intelligent and sound judgment

Insight: Patient has insight into problem.

CASE 3

Bio-data

Name:	F.I
Age:	25 Years Old
Gender:	Male
Religion:	Christian
Family	Monogamous
Occupation:	Unemployed
Tribe	Yoruba
Marital Status:	Single
Address	Ojo, Lagos
Source of Referral:	Consultant
Source of Information:	Client and Case File

Presenting complaints
Patient was presented with the following

complains:
Two months of Excessive Breathing; Two months of Serious Headache; Two months of Turning of Eyes; Two months of Twisting of Tongue

History of presenting complaint
The patient was apparently well until two months ago (August, 2015) when his mother noticed sluggishness, fatigue and serious uneasiness in him especially when he is doing domestic work, when engaged in long discussion. When his mother approached mother to asked what could be the cause, the patient did complain of headache and this did happen especially when the patient was stressed. After two days of the headache, it was joined with turning of eyes which later made the patient to stay away from stressful situation but the symptoms did not reduce instead, twisting of tongue and excessive breathing were noticed after five days making it difficult for the patient to do anything, as it affected his social and psychological functioning.

Though the symptoms occurred interchangeably but headache and excessive breathing always being the primary. They sought spiritual and traditional help as the case became worse before the admission.

Family history
Patient is 25yrs old, third in birth order of five and a monogamous family. The Father 55yrs old Christian, retired NEPA official with 6yrs history of hypertension, six years history of diabetes and 6 years history of cardiovascular accident with no past psychiatric history. The mother is 51yrs old civil servant, she is a christian with no history of past psychiatric illness, neither history of stroke nor diabetes.

The First born was the first among a set of twins. He is a 27 year old male and he holds OND certificate. He is a christian who is not married yet and a business man by profession. The second twin was also 27 years and a female who is married with one child. She holds Bachelor of Science and lives in Lagos with the husband. The twins have no history of psychiatric illness, no history of any medical illness. The patient is the third in the birth. The forth born is a 22 year old female who is a christian. She is an unemployed graduate with no history of psychiatric illness nor general medical illness. The Last born who is a 17 year old male secondary school student (Ss3) is without history of general medical illness nor history of psychiatric illness.

Past medical history: the patient was treated of jaundice while growing up at two days of birth and since that period he had being without any hospital admission.

Personal history
The patient's pregnancy, delivery was uneventful until eight (8) days after birth when jaundice began to grow in the head of the child; he was taken to nearby hospital in

which he was treated. His developmental milestone was normal and without delay at each stage of development. He started R. Nursery and Primary school at age four (4) between 1994 -2000, performed averagely without truancy but of good behaviour with teachers and fellow students. He moved to G. College Lagos at age ten (10) between 2001 -2006 and finished with good grade and relationship with students. He later proceeded to Gateway Polytechnics at age seventeen (17) from 2007 through 2008 to obtained OND. He got admitted through direct entry into O.O. University between 2010-2014 at age 20years old. He went for his NYSC age 24 and just concluded the Scheme a week ago.

Forensic history: nil
Drug history: nil

Psychosexual history
Patient attained puberty age at15years old without any form of sexual experience till date, his sexual orientation, identity and preference are normal.

Premorbid personality
Character - Introverted, Friendly
Habit - determined and focused
Attitude - optimistic and good attitude
Religious - involves in church activities
Mood - stable mood, and good affect

Mental status examination as at 25th of August,

Appearance: His appearance and behaviour was appropriate

Speech: His speech was coherent with a tone of desperation

Mood: His affect was appropriate and stable all through the clinical interview

Attention: His attention and concentration can be considered as good as he supplied most information requested

Memory: STM (good), LTM (not good)

Insight: He has insight into his current state of mental health.

CASE 4

Bio-data

Name:	O.T
Age:	31years
Religion:	Christian
Gender:	Male
Tribe:	Ijaw
State Of Origin:	Bayelsa State
Occupation:	Unemployed
Marital Status:	Single
Address:	Ogu - Bayelsa State
Referral Source:	Mental Health Team
Source of Information:	Client and Case File

Presenting complaints

Patient was presented with the following complains:

Two months threatening with knife at home; Two months keeping to himself; Neglecting personal Hygiene for two months; Once Attempt to rape female house occupant two (2) years ago; Use of alcohol, cannabis and cocaine for thirteen years.

History of presenting complaints

Patient was well until about two months prior to admission when he was noticed by his relatives to be threatening with knife any time argument or disagreement occurred in the house, he would carry the knife around sometimes for defensive purposes as he claimed.

Also around the same time two months ago, he would keep to himself, lock himself up in the room and does not reply to question; He would close the door and window and sit quietly on his own. No talking or laughing to self. Decline in his personal hygiene apart from changing his wears frequently. He once attempted to rape one of the female house occupants some two years ago. Before this event he claimed to be seduced by the lady and as a man he wanted to prove himself to her. There was history of use of substance prior to the onset of symptoms, he reported thirteen years of drinking alcohol (beer) in which he claimed he started while in secondary school in 2002 at age 18 with just one bottle per day but graduated to two weeks later to five bottles. Prior to admission he takes seven (7) bottles at a sit and he progressed to cannabis through peer influence and started with one wrap daily which increased to three to four wraps two months later. He reported his source of income was through pocket money from his parent. He also reported he started cocaine by self-experimentation thirteen years ago 2007 at age 23years old while he was already working in J.B. Company. His source of income then was monthly salary. He started with just small quantity and increased with little as cocaine to him was not good to his system. He claimed he experienced withdrawer syndrome when trying to stop cocaine, cannabis and alcohol ten (10) years ago. On alcohol he claimed he spent between #800 and #1200 per day, while on cannabis he spent up to #500 and on cocaine he spent #2000 in a month. He reported he collect and borrow money from his friends for substance when he's broke sometimes.

Past psychiatric history

This is the 4th episode in a 6 year life time history of mental illness. The first episode occurred in January 2009 at the age of 25 with a 3 week history of similar symptoms mentioned above. He was treated for Mental and Behavioural Disorder with psychoactive substance in University T. Hospital E. State. Nigeria. He recalled being on admission for a month and discharged when he became stable.

The second episode occurred in February

2011 and patient was readmitted at UTH for similar symptoms coupled with non-adherence to medication and stopped follow up at the out-patient centre (OPC). He was Diagnosed and treated for the same illness and was on admission for 6 weeks before being discharged. No report of total remission but patient was placed on medication which he could not give detailed report of.

The third episode occurred in August 2012 with similar symptoms at the same hospital. This episode was triggered by non-adherence to medication and not attending monthly follow up. Patient was admitted for 2 months and discharged.

The fourth episode which is the current one occurred on 4th of June 2015 with similar symptoms and he is currently undergoing treatment in (DATER PHASE 1) Neuropsychiatric hospital, Aro, Abeokuta *at the time of this report*. Diagnosed and treated for mental and behavioural Disorder Multiple Psychoactive Substance (Alcohol, Cannabis and Cocaine) comorbid with schizophrenia like psychosis.

Family history

Patient is from a Monogamous family. According to the patient, he is the 4th birth order of 5 children (all Male). Pa. O.O is the father. The 66years old retired company driver, lives in Bayelsa and Mother was 50years when he died due to cancer ten (10) years ago in the year 2005. She used to be a government primary school teacher at Yenogoa before she died.

The first born is Mr. O.D and the patient does not know his actual age, a Lecturer, he is married with 3 children (2 females and a male).The second born Mr. O.F, a 38year old married man is a medical doctor by profession, living in Benin. The third born Mr O.N, a 35 year old Married man with one child and a business man in Onitsha. The patient is the fourth born who is currently on admission in neuropsychiatric hospital, Aro. The fifth born is a graduate of sociology from UNN and he is a 27 year old male that is currently working with an NGO in Bayelsa State. Patient claimed to maintain a cordial relationship with the last born of the family and neither history of mental illness non substance use were recorded in the immediate family except in extended family (Uncle).

Personal history

Mr O.T a 31 years old male single Christian unemployed reported having heard of his normal pregnancy, labour, delivery and developmental milestone from his parent. Patient claimed there was no form of major illness medically that has ever required his hospitalization.

He started his Nursery Education in P.M. School, Rivers State, at age 4 between 1988 and 1995.He proceeded for his Secondary education at age 11 in E. State School for JSS1 and 2, between 1996-1997. He left the

school due to hike school fees and moved to B. D. G. School Bayelsa State in 1998 for his JSS3 to SS2 at age 13, while in the school there was series of reported truancy, he repeated SS2 due to poor performance and was dismissed at his second failure. He then moved to SS2 in O. Grammar School, Yenegoa at age 17 between 2002-2004 and graduated at 20years of age, he reported two credit pass in WAEC and others failed, since then he decided not to go to school again. No close relationship in his secondary school but got along well with colleagues and teachers.

He was employed as an unskilled labourer and J.B. Comp., Yenegoa in 2005 at age 21 and quit 2012 after seven years, then reported since then he had being engaged in different odd jobs, hustling to meet his daily needs until he was admitted June, 2015.

Past medical history: nil
Forensic history: nil
Drug history
As discussed in the history of presenting complain.

Psychosexual history
Patient claimed he attained puberty at age 14 but had his first sexual experience one year later 1999. He had dated up to 10ladies since then (1999) since 16years ago. He claimed he engaged in different styles during sex, he made use of contraceptive some times, he claimed he had never patronized sexual worker but takes substance sometimes before sex. He knew he is a man with masculine nature and heterosexual.

Premorbid personality
Patient claimed to be a quiet person, friendly, averagely religious, likes playing foot ball and listening to music.

Present living condition
Patient currently stays in a one room apartment in the house built by his father in Yenegoa.

Mental status examination
Appearance: Patient was neatly and appropriately dressed.

Speech: His speech was of heightened tone, relevant and coherent.

Mood: His mood was excited

Affect: His affect was blunt

Thought Process: No flight of ideas but presence of derailment and circumstantiality despite her being in touch with reality

Thought content: Patient denied any hallucinatory experiences or delusional disorder

Perception: Appropriate perception of stimuli

Cognition: Oriented to time place and person. Short and long term memory are intact, attention and concentration is fair

Insight: Patient has insight into current mental state and problem.

CASE 5

Bio-data

Name:	O.E
Age:	30 Years Old
Gender:	Male
Marital Status	Single
Occupation	Unemployed
Tribe	Igbo
Religion:	Christianity
Address:	Owerri, Imo State
Source of Information:	Client And Case File
Referral Source:	Parent

Presenting complaints

The patient was presented with following complains:

Two months threatening to stab mother with knife; Two months of talking irrationally and talking to self; Two years of Verbal and physical aggression; Fifteen years of excessive drinking of alcohol (dry gin and beer); Fifteen years of Smoking cigarette.

History of presenting complaints

Mr O.E was apparently well until 2 months ago prior to admission when he was noticed by his relatives to be threatening with knife to stab mother anytime she tries to correct him in the house or when anybody else in the family compound disagreed with him. This occurred simultaneously along side seeing strange things and talking to self when nobody around is talking to him.

Although, the patient had earlier been noticed of verbal and physical aggression which had lasted for 2 years before the admission, he would display this when his needs are not met by his parents, also when frustrated he would start fighting people around, sometimes results to destroying properties that are nearer.

The patient reported fifteen years history of excessive drinking of alcohol which include beer and dry gin that started at age 15. He started with a glass of wine per fortnight and progressed to four glasses in two weeks but presently he takes 12 bottles (of beer) on a sit, and take 'dry gin' only when he's broke. He reported that when he started his source of fund was through his pocket money and now he sometimes borrow money to buy substance when he's short of fund.

Furthermore, the patient said he started with a stick of cigarette at age 20 (15 years ago, precisely in the year 2000). He had been introduced to it by his friend way back at M.U., Owerri. He progressed to 2-3 sticks per day within two month. He felt cool, relaxed and refreshed when he first smoked cigarette and later progressed to 2 sticks per day shortly before the admission he claimed to smoked 20 sticks per day.

According to the patient his progression in the quantity of substance he takes was due to increase in his salivation, and he reported dizziness, sweeting shivering anytime he had not taking both alcohol and cigarette. He claimed he spent between #500 and #1500 per day on both alcohol and cigarette.

Family history

The patient was the fifth born of the monogamous family of six (4 males and 2 females). The father is 65years old, Professor in Food and Nutrition Depart, F. University Owerri, with history of occasional alcohol use (red wine), neither history of medical illness non history of psychiatry illness.

The mother is 60 years old, retired nurse, now in Owerri, with no history of alcohol use and no history of psychiatry illness.

First born is a 37 year old male civil servant who is married and living in Lagos with two children.

Second born is a 35 year old female medical doctor married with three children living in Onitsha, with neither history of substance use non history of psychiatry.

The fourth born is 33 years old man married and is currently living in Canada with one child and a wife.

The patient is the fifth born and he claimed he is closer to the last born of the family.

Sixth born is a female and single. she is 25 years old graduate of F. University but now into business in Owerri.

Personal history

Mr O.E a 30 years old male single Christian unemployed reported to have an uneventful pregnancy, labour, delivery and developmental milestone from his parent. Patient claimed there was no form of major illness medically that has ever required his hospital admission.

He started A.T. Nursery in Bauchi at age 6 (1991) with fair performances and he spent 1 year before he moved to F. U. primary school, Owerri at age 7 (1992-1998) due to his parent relocation. He graduated with average performance and normal peer friendship at 13years old. He proceeded for his Secondary education at age 14 and 19 between 1999-2004 in G. C. Owerri. While in secondary, he played truancy and able to pass at credit in all his results, he proceeded higher institution after good JAMB score. He got admission to M. U. between 2003 - 2006 at age 20 to study Elect/Elect. He was however expelled from the school while in 300level due to cult activities. He regained admission into Purchasing Department of A.S. University and graduated with pass result at age 26, between 2008 and 2011. While in ASU, he reported that he engaged in Shawama business and the income generated added to his pocket money from home.

He had been unemployed until January 2015 when he was employed as nursery school Teacher for 3 months and he was retrenched of his job due to his poor attitude towards work. Between August and October 2015 he was employed as physics and math teacher in secondary school Owerri and was later sacked due to his absenteeism, poor attitude towards work, drinking and sleeping at work, beating student mercilessly and all other related allegations before his admission in September.

Psychosexual history

Patient attained the age of puberty at 15yrs old, he had his first sexual experience at 18years old when he went on holiday in his Uncle's place in Port Harcourt, two weeks later he started patronizing commercial sex workers in PH where he sometime used contraceptive and engaged in different styles of sexual intercourse such as oral and anus. He reported no STDs or any sexual dysfunctions and claimed he had up to 40 girlfriends before his admission. He knew that he was a male with heterosexual orientation and masculine in his gender role.

Drug history

Patient started alcohol (wine and beer) while he was with his parent in Owerri, at age 15. He reported he started with 1 glass of alcohol per day then he progressed to two and three daily within three weeks, he substitute beer for wine or dry gin sometime just to be 'high' and graduated to 2-3 cups per day within two months, before the admission he takes 12 bottles at a sit.

Also, cigarette smoking started at age 20 (2005) while he was in M.U. Owerri. As he was influenced by his friend who was a cult member as he claimed. He reported he started with a stick of cigarette per day and progressed to three to four daily in in four weeks, presently he takes more than twenty sticks of cigarette before his present admission, he felt dizzy, dry mouth and sweating profusely anytime he has not taken cigarette.

Past psychiatry history

Mr. O.E is presently in his second episode of illness, he was admitted in September, presented with the above complains and diagnosed of MBD comorbid with psychosis, admitted at the Male Ward I of NPH Aro, Abeokuta. His first episode was in 2013 when he was 28years old he was taken to NPH (Nawfia) on the account of his excessive use of cigarette and he was being managed at Drug Rehab ward of the hospital, he could not specify the medication used then and the diagnoses.

Forensic history

He reported that he had being arrested by law enforcement agency on several reasons, but the last one he could remember was on account of substance use and late night movement, he said he spent three days in the police station before his parent bailed him

out.

Medical history: nil

Premorbid personality
Character: jovial, friendly and lively.
Hobby: playing table tennis.
Attitude: defensive, optimistic.
Religious: not religious but had a catholic background.
Mood: stable, not sad, fairly happy.

Mental state examination as at 13th of October,
Appearance: well groomed, attentive and eye contacts normal.
Motor: no abnormal motor movement.
Behaviour: normal and relatively at alert.
Attitude: cooperative, defensive.
Levels of conversation: alert and vigilant.
Orientation to time date and month was normal.
Speech: normal rate, amount.
Affect: not angry, not anxious.
Thought: was normal.

Conclusion
Clinical internship is a veritable tool in exposing and training prospective clinical psychologists in practical issues and relevant skills. In a developing country such as Nigeria where the role of a clinical psychologist has not been adequately understood by the generality of people, practical exposures as this intensive clinical training will help to build the interns the needed skills and expertise not only to talk as an expert, which will also help to put a clear line of demarcation between quacks and the professional clinical psychologists. Mental health in Nigeria can only get better if training as this is encouraged from both the undergraduate and post graduate arm of the discipline. This is because the health of patients requires psychotherapy both as a major and complementary therapy. Hence, training of capable hands to fill in generational gap and prevent dearth of professionals in the field should be highly encouraged.

Recommendations
i) As one can find among other mental health professionals, I would suggest that a body should be set up to consider and look into the welfare of members of the body by advocating a legislation that backs clinical practices and protects clinical interests in the field.
ii) Interns bear a lot of burden during programmes as this without any form of remuneration or stipend. This can contribute to loss of interest and frustration along the line. As noted in (i) above, such legislation could include stipends or financial remuneration as is seen among medical doctors, pharmacists and the likes during residential trainings.

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