

WHICH OF THE BIG-FIVE TRAIT IS MORE PREDICTIVE OF WORKPLACE BULLYING AMONG ACADEMICS IN NIGERIA?

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ABSTRACT

Most studies on workplace bullying have been *victimcentric* with little attention on the perpetrators, and this brings about a research gap in knowledge. Also, personality traits have been associated with bullying, but studies on the relationship between the Big-Five traits and tendency to perpetrate bullying among academics are lacking. This paper explored the Big-Five traits as predictors of tendency to perpetrate bullying among 475 (males = 275 and females = 200) academics in some Nigerian public universities. Participants' ages ranged from 23 to 52 years ($M_{age} = 37.42$ years, $SD = 8.07$). Using hierarchical multiple regression statistics, findings indicated that after controlling for age and gender, the Big-Five traits accounted for an additional 20% of the variance in bullying. Binary logistic regression analyses revealed that extraversion, agreeableness, openness to experience, and neuroticism correctly classified self-labelled as perpetrators or non-perpetrators. These data indicate that the Big-Five personality traits may be a useful way for understanding the predisposing factors in the tendency to perpetrate workplace bullying among academics. Based on the findings, some recommendations were made, including periodic mandatory personality check-up for current academics and new entrants into positions in the Nigerian universities.

Key words: Workplace bullying, big-five traits, academics, university

INTRODUCTION

Bullying is a physical, verbal, or psychological intimidation intended to cause fear, distress, or harm to the victim (Baldry & Farrington, 2000). Bullying act often occurs without apparent provocation and can be carried out by physical contact, verbal aggression, mean gestures, and ostracising the victim from the group (Vessey, DeMarco, & DiFazio, 2011). Harming and controlling people through physical means is physical bullying, while harming through damaging people's relationships with others is relational bullying (Crick, Casas, & Ku, 1999).

The workplace is meant to be a “second home” but due to the interpersonal interaction at workplace, relational problems can arise, and consequently bullying. Workplace bullying is a collective expression that includes various forms of ill treatment and hostile behaviour in the work setting (Fox & Stallworth, 2005). It may concern work-related or personal issues (Cowie, Naylor, Smith, Rivers, & Pereira, 2002). Workplace bullying can manifest in terms of verbal abuse, behaviours that are threatening, intimidating or humiliating, and sabotage; or some combination of the three (Namie & Namie, 2009). Workplace bullying can be vertical, occurring between superiors and subordinates, as well as horizontal, occurring between peers or colleagues (Hoel, Rayner, & Cooper, 1999).

Workplace bullying is marked by four main criteria (Einarsen, Hoel, Zapf, & Cooper, 2003). The first criterion is that the target is exposed to direct or indirect ill treatments that range from the most subtle, even unconscious, incivilities to the most blatant, intentional emotional abuse (Fox & Stallworth, 2005). The second criterion is that the negative acts in question are repeated and persistently. That is, the ill act is not a “once-off” event but rather an aggressive behaviour that is frequently directed toward one or more employees.

The third criterion is the duration of exposure to the negative experience; that is, the period of time over which the repeated events take place (Rayner, Hoel, & Cooper, 2002). As for frequency and duration, Leymann (1996) posits that the targets must be exposed to at least one negative act on a weekly basis, Mikkelsen and Einarsen (2001) indicate that a minimum of two negative acts is a more accurate measure of workplace bullying, while Zapf, Knorz, and Kulla (1996) apply a period of 6 months or longer to differentiate bullying from lower-level instances of aggression and incivility. The last characteristic is power disparity between the bully and the target, which creates a hostile work environment (Salin, 2003). Typically, the victim feels helpless in stopping the negative acts to which he or she is being subjected (Nielsen, Matthiesen, & Einarsen, 2008). Thus, bullying develops as an escalating process during the course of which the person confronted ends up in an inferior position and becomes the target of systematic negative social acts (Einarsen *et al.*, 2003). No wonder, workplace is considered as a space for emotional experience that allows relationships to be defined, maintained, and abused (Kaukiainen *et al.*, 2001).

Characteristics of bullies

There is a consensus that bullies are selfish, self-obsessed, insecure or envious of other employees, insensitive, threatened by competence, manipulative, have superiority complex, lack self-control, social skills, vision or initiative (Fisher-Blando, 2008; Namie, 2010). Because bullies do not know how to charm, persuade, or influence, they resort to personal or professional intimidation (Furnham, 2004). They have a desire to dominate others; and when things go wrong, they play blame games (Schachter, 2004). The compulsion to act aggressively is highlighted in bullies’ constant demands for respect and consideration, rarely reciprocating the same treatment to others (Kitt, 2004).

So far, the majority of research on workplace bullying is victimcentric (e.g. Chipps, Stelmaschuk, Albert, Bernhard, & Holloman, 2013; Nielsen *et al.*, 2008; Yamada, Cappadocia, & Pepler, 2014). A few studies (e.g. Coyne, Chong, Seigne, & Randall, 2003; Matthiesen & Einarsen, 2007) adopt the perpetrators’ perspective. That

is, employees who admit exhibiting negative acts with the intention of causing harm or distress to co-workers. This brings about a research lacuna; an irony refers to as the “black hole” in workplace bullying research (Rayner & Cooper, 2003), and a deficiency addressed in this article. According to Samnani and Singh (2012), research on perpetrators remains work-in-progress and therefore highlights the need for more research on the perpetrators’ explanation of their own behaviour. We argue that with an understanding of why individual perpetrate workplace bullying, our ability to develop a comprehensive intervention programme that seeks to help the individuals will be enhanced.

To move further, though workplace bullying is ubiquitous and research interest on the phenomena is growing, unfortunately, scientific research among academics is few. Most researches in this area were concentrated on banking, information technology, and healthcare professions (e.g. Chippset *et al.*, 2013; Ikyanyon & Ucho, 2013; Johnson, 2011). Nevertheless, interest in research on bullying in the academia has been growing in Western cultures (Lampman, Phelps, Bancroft, & Beneke, 2009; Mckay, Arnorld, Fratzi, & Thomas, 2008; Ozturk, Sokmen, Yilmaz, & Cillngir, 2008; Yamada *et al.*, 2014), but it has not received similar attention as in the global community from researchers in Africa (Cunniff & Mostert, 2012; Owoyemi, 2010). Unfortunately, bullying is gradually becoming a challenge for organisations in Nigeria and their employees (Oghojafor, Muo, & Olufayo, 2012), and so far, there is a paucity of research on bullying among academics in Nigeria.

The present study focuses on bullying among academics because academia is a setting where stress, interpersonal conflict, frustration, manipulation, and neck-breaking competition are common (Kircher, Stilwell, Talbot, & Chesborough, 2011). Strained and competitive work environments, where conflicts are more often settled by taking advantage of one’s position or authority, have been associated with elevated levels of workplace bullying (Vartia, 1996). Tenure also provides academics with a sense of entitlement to misbehave and use feedback of others as a means of criticism rather than support causing harm to the target. This decreases collegiality and increases bullying in the academia (Keashly & Neuman, 2010).

Moreover, academic freedom is a source of conflict on many university campuses (Keashly & Neuman, 2010). Under the notion of academic freedom, academics are, “entitled” to teaching autonomy. Perpetrators then use this opportunity to victimize non-conformists to their set standard. According to De Cuyper, Baillien, and De Witte (2009), these unique characteristics of academia generate cultures and environments which breed hostility. The assertion was buttressed by Price Spatlan (1995) who reported a 23% rate of verbal abuse among university faculty and staff in an American university.

Clearly, bullying has serious health, social, and economic consequences for the victims, perpetrators, and organisations (Einarsen, Hoel, Zapf & Cooper, 2011), and bullying may have foundations in personality types (Parkins, Fishbein, & Ritchey, 2006). To address the personality dispositions, self-confidence, aggressiveness, impulsiveness, self-esteem, hostility, extraversion, independency, egocentricism, selfishness, and perspective taking (Matthiesen & Einarsen, 2007; O’Moore & Kirkham, 2001; Seigne, Coyne, Randall, & Parker, 2007) have been documented as factors related to bullying. Baughman, Dearing, Giammarco, and Vernon (2012) reported that psychopathy was

most strongly associated with bullying, followed by Machiavellianism and narcissism, while Parkins *et al.* (2006) found that social dominance orientation, low perspective taking, and being male affected frequency of perpetrating bullying. Lee, Ashton, and Shin (2005) indicated that honesty-humility and extraversion predicted both anti-social behaviour directed against individuals (ASBI) and anti-social behaviour directed against the organisations (ASBO), but agreeableness was related to ASBI, whereas conscientiousness was related to ASBO.

In addition, Linton and Power (2013) reported that perpetrating bullying was positively associated with Machiavellianism, narcissism, psychoticism, aggression, and dis-inhibition. Other researchers (Einarsen, Raknes, Matthiesen, & Hellesoy, 1994; Skarlicki, Folger, & Tesluk, 1999; Zapf & Einarsen, 2003) have established a link between personality traits and victimization. These personality traits include threatened self-esteem, lack of social competence, high social anxiety, past history of aggression, and negative affectivity. Researchers (Coyne, Seigne, & Randall, 2000; Glasø, Matthiesen, Nielsen, & Einarsen, 2007) have used the Big-Five personality traits to describe the victims' personality. Coyne *et al.* (2003) found that self-reported and peer-reported bullies differ on mental stability. However, they found minor and insignificant group differences on dimensions such as independence, conscientiousness, and extraversion.

Regrettably, there has not been much research on the associations between all the Big-Five traits and tendency to perpetrate bullying, particularly among academics in Nigeria. To add to the limited knowledge from this perspective, the aim of study is to explore the joint and relative influences of the Big-Five traits on the tendency to perpetrate bullying. Another goal of the study was to determine whether each of the Big-Five traits will correctly classify self-labelling perpetrators or non-perpetrators. The findings are aimed to equip management teams of educational institutions with the knowledge of how the personality traits can influence negative acts at workplace. Such information can aid in developing prevention interventions aimed at modifying individuals' personalities and reducing workplace bullying.

Theoretical background and hypotheses

The theoretical perspective of this study is the 'trait theory'. Trait theorists are primarily interested in the measurement of 'traits', which is defined as habitual patterns of behaviour, thought, and emotion (Kassin, 2003). To these theorists, traits are relatively stable over time, differ among individuals (e.g., some people are dominant whereas others are submissive), and influence behaviour. Personality traits can influence people's perceptions and evaluation of the environment, their attributions for causes of events, their emotional responses, and their ability to inhibit or exhibit anti-social impulses in the workplace (Spector, 2010).

Most personality theorists consider traits to be the fundamental unit of personality (Morizot & Miranda, 2007). The general taxonomy of traits; the "Big Five" personality dimensions represent the consensus approach in the self-reported measure of personality among adults (John & Srivastava, 1999). These dimensions are not from a particular theoretical postulation, but were derived from analyses of the natural-language term people use to describe themselves and others (John & Srivastava, 1999). Rather than replacing the previous systems, the Big-Five taxonomy serves an integrative

function because it can represent the various and diverse system of personality in a common framework (Costa & McCrae, 1992). These factors are openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. The Big-Five model is the conceptual framework for this study.

Openness to experience (O) also referred to as 'intellectance', is associated with inquisitiveness and imagination (Goldberg, 1992; John & Srivastava, 1999). Open people tend to be more curious, imaginative, and sensitive. Close people tend to be rigid. The tendency to be resistant-to-change can prompt close people to display behaviours that are not typically socially acceptable. Thus, openness is expected to be negatively related to bullying.

Conscientiousness (C) reflects the general tendency to be more reliable rules-compliant (Roberts, Chernyshenko, Stark, & Goldberg, 2005). Highly conscientious individuals are careful, organised, and scrupulous. Those low on conscientiousness are irresponsible and unscrupulous. Thus, the tendencies for low conscientious individuals to perpetrate bullying are high, possibly due to the fact that highly conscientious individuals are reliable and rules-compliant.

Extraversion (E) reflects the degree, to which an individual is sociable, assertive, active, and energetic (John & Srivastava, 1999). Extraverts are carefree, dominant, assertive, and fond of practical jokes. Introverts are quiet, low-key, and timid. Because introverts lack the exuberance, energy, and assertiveness of extraverts, they might not be capable of engaging in bullying acts. Therefore, the tendencies for extraverts to perpetrate more bullying are high because bullies appear to be impulsive, assertive, and carefree.

Agreeableness (A) describes accommodating and cooperative orientation rather than suspicious and antagonistic demeanour (Goldberg, 1990). Agreeable individuals tend to be considerate, tolerant, and cooperative. Disagreeable people are manipulative, inflexible, suspicious, ruthless, irritable, and self-centred (Costa, McCrae, & Dembroski, 1989). Given that agreeable people desire positive relationship with others, they are less likely to perpetrate bullying.

Finally, neuroticism (N), also known inversely as emotional stability refers to the tendency to experience negative emotions and disgust (John & Srivastava, 1999). High scorers tend to be hostile, impulsive, angry, and anxious compared to low scorers. Emotional stability seems to be important in interpersonal relationships and social interactions. Neurotic individuals lack ability to self-regulate responses to interpersonal conflict than those who are emotionally stable (Dahlana, Edwards, Tubré, Zyphurd, & Warren, 2012). Hence, neurotic individuals are more likely to perpetrate bullying.

In terms of control variables, Lynch (2002) posited that women and men of all races and ages and in all workplaces, regardless of the size or type of business, can potentially perpetrate workplace bullying. The first demographic variable we proposed as a control variable is gender because bullying may be a way to reinforce the masculinity of individuals, groups, and the job itself. In general, studies have shown that perpetrators of workplace bullying are more often male than female (Hauge, Skogstad, & Einarsen, 2009; Namie, 2010; Samnani & Singh, 2012). The second demographic variable proposed as a possible control variable is age. Although limited research exists regarding age and tendency to perpetrate workplace bullying, especially among academics. However, Quine (2002) found comparable levels of victimization between young and old

employees. In contrast, Einarsen and Skogstad (1996) reported that older employees were being bullied more than younger employees.

Given that the characteristics of bullies resemble those of high scorers on extraversion, and neuroticism, and low scorers on openness, conscientiousness, and agreeableness (Fisher-Blando, 2008; Namie, 2006); these traits can be the predisposing factors in perpetrating bullying, and correctly differentiating self-label perpetrators or non-perpetrators. Researchers have indicated agreeableness and conscientiousness as the factors associated with delinquency and, more broadly, antisocial behaviours in both correlational (e.g. Mak, Heaven, & Rummery, 2003; Miller & Lynam, 2001) and between-group comparison (e.g. Le Corff & Toupin, 2009; van Dam, Janssens, & De Bruyn, 2005) studies. The following research questions guided the research design, data collection procedures, and data analyses in the study:

1. Do the Big-Five personality traits predict workplace bullying among academics?
2. To what extent does each of the Big-Five personality traits accurately classify self-identified perpetrators or non-perpetrators of workplace bullying?

METHOD

Design and participants

This was a cross-sectional survey that involved 475 academics (275 males, 57.9% and 200 females, 42.1%). Participants' ages ranged from 23 to 52 years ($M_{age} = 37.42$ years, $SD = 8.07$). Participants were drawn from Faculties of Social Sciences 119 (25.1%), Education 48 (10.1%), Medical Sciences 88 (18.5%), Arts 91 (19.2%) and Sciences 129 (27.2). Their academic qualifications were Master degree (275, 57.9%) and Doctorate degree (200, 42.1%). Their marital status varied from married 196 (41.3%), single 137 (28.8%), divorced 49 (10.3), separated 43 (9.1%), and widowed 50 (10.5%). Tenure in organisation ranges from 3 to 22 years ($M = 10.43$, $SD = 4.77$). At the time of the study, 35 respondents (7.37%) were Graduate Assistant, 62 (13.05%) were Assistant Lecturer, 92 (19.37%) were Lecturer II, 84 (17.68%) were Lecturer I, 96 (20.21) were Senior Lecturer, 49 (10.32%) were Associate Professor, and 57 (12.00%) were Professor. Only 97 (14.11%) participants labelled themselves as perpetrators.

Measures

Big-Five traits: The traits of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism were measured using the Big-Five Inventory (BFI, John, Donahue, & Kentle, 1991). The instrument is a 44-item self-report inventory measuring neuroticism (8 items) "I see myself as someone who is relaxed, handles stress well", extraversion (8 items) "I see myself as someone who is talkative", openness to experience (10 items) "I see myself as someone who is curious about many different things", agreeableness (9 items) "I see myself as someone who tends to find fault with others", and conscientiousness (9 items) "I see myself as someone who does a thorough job". Participants were asked to indicate their response to each item on a 5-point response format with options ranging from 1= Strongly Disagree to 5 = Strongly Agree. Higher scores indicated higher levels of each dimension. According to John and

Srivastava (1999), the alpha of BFI scales ranges from .75 to .90 and average above .80; 3 months test-retest reliabilities range from .80 to .90.

Bullying: Tendency to perpetrate bullying was measured in two ways. First, the Negative Acts Questionnaire-Revised (NAQ-R, Einarsen, Hoel, & Notelaers, 2009) was adapted. The scale contains 22 items and response categories were never (1), occasionally (2), monthly (3), weekly (4), daily (5). The items were adapted to perpetrator wording instead of victim wording. Sample items on the adapted NAQ-R include “Withholding information which affects someone’s performance”, “Humiliating or ridiculing someone in connection with his/her works”. Tendency to perpetrate bullying was measured by adding and averaging the total score on the adapted NAQ-R. Higher scores above the mean represent more tendencies to bullying, and vice-versa. The scale has excellent internal consistency ($\alpha = .90$) and good content and discriminant validity (Einarsen *et al.*, 2009).

Given that the NAQ-R items were adapted in this present study, a factor analysis was conducted to determine if any underlying structure exists for the items. Principal components analysis (PCA) was conducted utilising Varimax rotation. The initial analysis retained six components with 53.01% of total variance. Four criteria were used to determine the appropriate number of components to retain: eigenvalue, variance, scree plot, and residuals. Criteria indicated that retaining three components should be investigated. Thus PCA was conducted to retain three components and applied the Varimax rotation. Inclusion of three components increased the model fit as it decreased the number of residuals exceeding the .05 criteria. After rotation, three components emerged, these are work related issue which accounted for 13.25%, personal issues which accounted for 12.59%, and physical aggression which accounted for 11.12%. These were the three factors established by Einarsen *et al.* (2009). However, item sixteen did not load on any of the three factors. (See appendix 1).

Self-label perpetrator. The adapted NAQ-R deals with the frequency, duration and perception of bullying, but not self-label as perpetrators or non-perpetrators. Therefore, the respondents were provided with a definition of bullying as follows: “Bullying refers to the perpetration of negative behaviours, which can either be physical, psychological and/or verbal that inflict harm on another person. The victimization should have been occurring repeatedly and consistently for at least six months. The participants were asked to indicate “Yes or No” whether they have subjected anyone in their workplace to such behaviour in the last six months.

Procedure

At the onset of data collection, three federal and four state universities in the South-western Nigeria were randomly selected for inclusion in the study. The relevant authorities were approached for permission to conduct the survey among their academics. To obtain informed consent and to reduce self-report bias, confidentiality and anonymity were provided through a highlighted sentence at the top of the questionnaire that requests the participants to indicate their interest in participating in the study and not to identify themselves in any way. Through snow-balling technique the researcher established contacts with colleagues at other universities who administered the questionnaires to their colleagues at their departments, faculties, and during the meetings of the Academic Staff Union of Universities (ASUU). ASUU is the umbrella union for

all academic staff in public universities in Nigeria. All contacts were briefed on the procedures for data collection. A total of 700 hundred questionnaires were allocated in equal proportion of 100 questionnaires per university. A total of 514 completed questionnaires were returned, and after screening, only 475 were found valid for data analysis, the remaining 39 questionnaires were discarded due to incomplete data.

RESULTS

Means, standard deviations, ranges, and internal consistency using Cronbach's alpha coefficients for the study variables can be found in Table 1.

Table 1:

Descriptive Statistics on the Study Variables (n = 475)

Variables	Range	Minimum	Maximum	Mean	SD	Skewness	Kurtosis	Alpha
Openness	27.00	18.00	45.00	32.69	4.90	-.89	-.27	.98
Conscientiousness	30.00	13.00	43.00	30.36	5.22	-.22	.02	.82
Extraversion	68.00	17.00	85.00	43.56	16.57	-.38	-.35	.78
Agreeableness	30.00	13.00	43.00	30.81	4.79	-.20	.03	.92
Neuroticism	22.00	13.00	35.00	34.41	3.69	.02	-.08	.73
Workplace bullying	124.00	31.00	155.00	116.61	30.15	-1.08	.81	.73

Predictors of workplace bullying

As suggested by Menard (2010), preliminary analysis of the data was performed to check the assumptions of normality, linearity and multicollinearity with respect to the selected predictors of the study. The Big-Five traits were subjected to linear regression analysis to evaluate multicollinearity among the predictors. Multicollinearity among predictors in regression analysis creates problems for the validity of the model under investigation. In particular, it affects the validity of the statistical tests of the regression coefficients by inflating their standard errors (Garson, 2010). Results showed that the data did not violate the multicollinearity assumption. The tolerance value of each independent variable was greater than .72 which exceeded the suggested criteria of below .10 (Pallant, 2007). Lack of multicollinearity among the independent variables was also supported by the obtained variance inflation factor (VIF) values. They were all well below the cut-off value of .10 (Field, 2009). The VIF values of the variables ranged from 1.04 to 1.45.

To test the predictive power of the Big-Five personality traits on workplace bullying, two hierarchical regression analyses were conducted. In the first step, age and gender were entered as independent variables and in the second step, the Big-Five personality traits were entered as predictors. The results were presented in Table 2.

Table 2:

Hierarchical Multiple Regression on Workplace Bullying

Variables/ steps	B	SE	B	T	Correlations			Collinearity statistics	
					Zero-order	Partial	Part	Tolerance	VIF
<i>Step 1</i>									
Age	.36	.64	.03	.57	.03	.03	.03	.94	1.07
Gender	.31	3.45	.01	.09	-.00	.01	.01	.94	1.07
<i>R</i> = .03	<i>R</i> ² = .00	<i>Adj. R</i> ² = .01	$\Delta R^2 = .00$	<i>F</i> = 0.16	$\Delta F = 0.16$				
<i>Step 2</i>									
Openness	-.67	.35	-.11	1.93*	-.27*	-.11	-.10	.79	1.27
Conscientiousness	-1.46	.35	-.25	-4.22**	-.37*	-.23	-.21	.79	1.45
Extraversion	.33	.09	.18	3.58**	.17*	.20	.18	.79	1.04
Agreeableness	-.83	.35	.13	-2.37**	-.26*	-.13	-.12	.80	1.26
Neuroticism	.77	.42	.10	1.84*	.18*	.10	.09	.94	1.07
<i>R</i> = .45	<i>R</i> ² = .21	<i>Adj. R</i> ² = .19	$\Delta R^2 = .20$	<i>F</i> = 11.81**	$\Delta F = 16.46**$				

Note: ** $p < .001$, * $p < .05$. N = 475.

The results revealed that Openness to experience had a significant negative correlation with workplace bullying ($r = -.27, p < .05$). Conscientiousness had a significant negative correlation with workplace bullying ($r = -.37, p < .05$). There was a significant positive relationship between extroversion and workplace bullying ($r = .17, p < .05$). Agreeableness was inversely related to workplace bullying ($r = -.26, p < .05$). Neuroticism had a significant positive relationship with workplace bullying ($r = .35, p < .05$). There was no significant relationship between workplace bullying and the following; age ($r = .03, p > .05$) and gender ($r = -.00, p > .05$). Overall, the results suggest relationships between some predictors and the criteria. This means that these variables should be included in further analyses as they have met the requirements of regression analysis.

In the first step, the results reveal that age, $\beta = .03; t = .57; p > .05$ and gender, $\beta = .01; t = .09; p > .05$ did not contribute significantly to the tendency to perpetrate workplace bullying. The results show that the two variables jointly contributed 00% with $F(2, 473) = 0.133, p > .05$ to the variance in the criterion variable. In step 2, the results show that all the personality traits significantly predicted the tendency to perpetrate workplace bullying; $R^2 = .21$ and $F(5, 470) = 11.814, p < .01$, indicating that the variables contributed about 21% to the variance in victimizing others, and R^2 change from 00% to 20%. With this finding, it indicates that the Big-Five personality traits contributed more to the prediction of workplace bullying beyond the contribution of age and gender.

When each trait was considered, conscientiousness, $\beta = -.23; t = -4.22; p < .001$ contributed more to the tendency to bullying, and this was followed by extraversion, $\beta = .18; t = 3.58; p < .001$, agreeableness, $\beta = -.13; t = -2.37; p < .001$, openness to experience, $\beta = -.11; t = -1.97; p < .05$ and neuroticism, $\beta = .10; t = 1.84; p < .05$, respectively. The finding indicated that among the Big-Five traits, conscientiousness was the most significant predictor of workplace bullying. The prediction of conscientiousness

was followed by that of extraversion, agreeableness, openness to experience, and neuroticism. This supports the first research question.

The binary logistic regression procedure was used to determine whether the Big-Five personality factors were predictive of the likelihood of being a perpetrator (coded as Yes = 1) or not a perpetrator (coded as No = 0). The results indicate that when all the Big-Five factors are considered together, they significantly predict self-label as perpetrators or non-perpetrators, (-2 Log Likelihood 103.54; Goodness-of-Fit=511.49; $\chi^2(5) = 24.32, p < .001$). This implies that the odds to self-label as perpetrators or non-perpetrators were related to the Big-Five personality traits.

The model correctly classified approximately 25.7% of the cases. The “pseudo” R^2 estimates indicate that the model explained between 14% (Cox & Snell R Squared) and 21% (Nagelkerke R Squared) of the variance in self-label perpetrators. Table 3 presents a summary of the binary logistic regression coefficients, Wald statistics, odds ratios [(Exp (B))] along with a 95% CI.

Table 3:

Logistic Regression on Workplace Bullying

Variables	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>df</i>	<i>p</i>	<i>Odds ratio (OR)</i>	<i>95% CI</i>
Openness	-1.03	.03	24.16	1	.04	1.21	.98-1.01
Conscientiousness	-1.19	.53	5.75	1	.01	1.10	.91-1.02
Extraversion	2.85	.04	.41	1	.00	3.47	1.01-1.12
Neuroticism	1.02	.08	4.28	1	.00	2.33	.96-1.09
Agreeableness	-1.10	.03	9.85	1	.04	1.20	.94-1.04
Constant	.64	1.23	1.53	1	.61	.19	

Wald statistics indicated that all the variables significantly predict self-labelling as perpetrators or non-perpetrators. For the coefficients, the strongest predictor was extraversion, the OR is 3.47, and it is statistically significant ($p < 0.01$); therefore, extraverts are 3.47 (or 47%) times more likely than introvert to label themselves as perpetrators. The OR for neuroticism indicated that highly neurotic academics are 2.33 (or 33%) times more likely than emotionally stable academics to label themselves as perpetrators. The effect of openness to experience is also significant but negative, indicating that closed people are more likely to label themselves as perpetrators than open people. The OR indicated that they are 1.21 times (or 21%) more likely to label themselves as perpetrators. The OR for agreeableness indicated that low agreeable (disagreeable) academics are 1.20 times (or 20%) more likely to identify themselves as perpetrators compared to agreeableness. For conscientiousness, the 1.10 odds ratio means that low conscientious individuals are 1.10 times (or 10%) more likely to label themselves as perpetrators compared to high conscientious individuals. This supports the third research question.

DISCUSSION

The primary aim of this study was to explore the influence of the Big-Five personality traits in predicting the tendency to bullying among academics and to determine whether each of these traits will correctly classify self-labelled perpetrators or non-perpetrators. The findings suggest that conscientiousness, extraversion, agreeableness, openness to experience, and neuroticism were significant predictors of bullying tendencies. The effects remained even after controlling for age and gender. The findings confirm that the Big-Five personality traits are related to bullying and provide very strong support for the five-factor theory.

Furthermore, the findings suggest that individuals who portrayed themselves as conscientious, agreeable, open, extraverted, and neurotic were less likely to perpetrate bullying. Therefore, conceptualising tendencies to perpetrate bullying and self-labelling as perpetrators in terms of personality traits as suggested by Spector (2010) appears to make some sense. It should be noted that some characteristics of bullies resemble those of individuals who are low in agreeableness, conscientiousness, and openness to experience, and those of individuals who are high in both neuroticism and extraversion (Fisher-Blando, 2008; Namie, 2010). The findings dovetail nicely with results from a number of cross-sectional studies (e.g. Lee *et al.*, 2005; Matthiesen & Einarsen, 2007; Seigne *et al.*, 2007) which indicated association between some personality traits and bullying. Previous research has also found a link between personality factors and bullying (e.g. Linton & Power, 2013; Skarlicki *et al.*, 1999). The findings concur with the notion of Zapf and Einarsen (2003) on comprehensive model of workplace bullying that highlights the personality of victims and perpetrators. The findings imply the need to acknowledge that personality traits can be the psychological basis for anti-social behaviour and that proper and thorough assessment of personality traits will yield vital information regarding predisposition to workplace behaviour.

With regard to the extent of the relation between each of the Big-Five traits and bullying, the personality variables of conscientiousness, extraversion, agreeableness, openness to experience, and neuroticism, respectively, are highly associated with more tendencies to bullying. The finding is consistent with previous quantitative studies in this area (e.g. Baughman *et al.*, 2012; Coyne *et al.*, 2007; Linton & Power, 2013; Parkins *et al.*, 2006; Skarlicki *et al.*, 1999; Zapf & Einarsen, 2003). Given the research findings to date, it appears Big-Five traits may be dispositional factor underlying bullying tendencies among academics.

The most prominent pattern of results in the present study was that bullying is more likely when individuals were lower in conscientiousness, agreeableness, and openness to experience and higher in extraversion and neuroticism. What is also illuminating is that labelling self as perpetrators or non-perpetrators have stronger associations with each of the Big-Five personality traits. The findings indicated that individuals who portrayed themselves as extrovert, neurotic, close-minded, disagreeable, and low conscientious were more likely to self-label themselves as perpetrators. Although agreeableness and conscientiousness are two traits that have emerged as strong predictors of delinquency and, more broadly, antisocial behaviours in both correlational (e.g. Mak *et al.*, 2003; Miller & Lynam, 2001) and between-group comparison (e.g. Le Corff & Toupin, 2009; van Dam *et al.*, 2005) studies, nevertheless, the role of

personality in bullying had been highlighted in previous studies (Coyne *et al.*, 2003). The findings supported the hunch that personality traits play a significant role in tendencies to bullying and self-identification as perpetrators or non-perpetrators (Parkins *et al.*, 2006), and uphold the role of the Big-Five personality traits in workplace victimization.

People who are less conscientious have greater tendencies toward irresponsibility, lack dependability, less likely to adhere to social etiquette and norms for appropriate interpersonal relationship. Perhaps these characteristics also lead them to report more bullying tendencies and label themselves as perpetrators. This tentatively suggests that psychosocial interventions designed to develop skills associated with conscientiousness (e.g. self-discipline, regard for consequences) might serve the purpose of inhibiting negative work behaviours. It will be important to assess these types of skills in future research using objective conscientiousness and bullying measures, to further assess the potential efficacy of such interventions.

The lower scores in Agreeableness also reflected that individuals who are more vengeful, antagonistic, quarrelsome, and manipulative are likely to perpetrate bullying and self-label themselves as perpetrators. Perhaps agreeable individuals reported fewer tendencies to bullying because they want to avoid disruption of relationships and are concerned with the welfare of others. Agreeableness trait may be self-restricting, and can foster more cooperative exchanges between people that prevent hostility from initially developing. The findings imply that an intervention strategy might be to identify individuals low in agreeableness through systematic personality evaluations, and expose them to personality modification intervention programme (e.g. respect for the right of others, good social relations, and mentoring).

Neurotic individuals who are more temperamental, envious, and fearful compared to emotionally stable individuals who are not easily upset and free from persistent negative feelings are likely to perpetrate bullying and label themselves as perpetrators. This finding is fairly anticipated because of the feelings of self-consciousness and worry that characterise neurotic individuals, emotional stability is crucial in interpersonal relationships and social interactions. It represents individual's ability to self-regulate responses to interpersonal conflict (Dahlén *et al.*, 2012). For this reason, the assessment of Neuroticism trait may reveal a predisposition to engage in negative acts at workplaces. Because employees higher in neuroticism may have low threshold for stress, they may benefit from techniques that address coping with anger and anxiety. Additionally, organisational management should promote an organisational culture that prevents workplace harassment and bullying.

Lower scores in Openness to Experience reflected that individuals who are not very curious, imaginative, or intelligent are more likely to perpetrate bullying and label themselves as perpetrators. This is because when these individuals are confronted with diverse views; it is likely that their decreased cognitive ability and rigidity in thought which are antithetical to values that deemphasise maintaining the status quo may predispose them to adopt unorthodox means in order to maintaining the status quo. Open individuals, who are more aware of their feelings, are likely to scrutinize negative thoughts and emotions with openness and clarity, and use this appraisal to guide their reactions to work situations. The findings imply that negative acts of close-minded individuals can be reduced through intervention strategies aim at increasing perspective-taking abilities and social problem-solving skills.

Higher scores on Extraversion dimension suggested that individuals who are more impulsive, carefree, talkative, and dominant are prone to perpetrate bullying and label themselves as perpetrators. This may be that bullies have more desire to control and dominate others (Fisher-Blando, 2008; Namie, 2010); therefore, when extraverts want to bolstering their needs for peer attention, social status, and domination, bullying may be one approach extroverts used to gain the respect and admiration of others. This finding suggests that behavioural scientists would benefit from examining the extroversion patterns of bullying behaviour in the academic settings. Such examination and identification of crucial patterns can facilitate theoretical development of the precise psychological mechanisms involved in why extraverts are more likely to perpetrate bullying, and use such understanding to design strategies aimed at personality modification. For instance, universities and other related organisations may engage social psychologists to provide educational opportunities for all employees on behavioural impulsivity, personality differences, and promote a culture of support and recognition for all employees.

Potentially, psychological factors such as the Big-Five traits can explain why some employees perpetrate bullying and why others do not. Therefore, it is important that these personality traits are given consideration in an attempt to understand holistically the issue of workplace bullying.

To this end therefore, and on the basis of the findings, the following are suggested: (a) mandatory and periodic personality check-up for all current employees in Nigerian universities, (b) personality check-up should be inculcated into the medical check-up for new entries into various positions in the Nigerian universities.

Personality and social psychologists should be engaged in universities to assess the personality of employees periodically and suggest appropriate intervention designed for individuals with excess or deficit in personality make-up. The current practice in Nigerian organisations, whereby new employees were mandated to undergo medical examinations before assuming duties without personality assessment is haphazard. Personnel examination should include personality assessment. Elsewhere in some developed and developing countries, the importance of personality assessment in personnel assessment has been recognised; Nigerian organisations should not be left behind in this practice.

It is ethically, legally, financially, and practically beneficial for organisations to take proactive actions in ensuring a work environment where bullying is not tolerated. To this end, organisations should put specific anti-bullying policy and formal reporting methods in place to allow the victim/s and other employees to report these negative acts. Organisation's policy should include whistleblowing to reduce these negative acts. Also, psychology professionals need to be involved with the development of anti-bullying policy to support the creation of an organisational climate that is devoid of bullying. Stakeholders that want to address workplace bullying need to consider variables investigated in this study.

CONCLUSION

Generally, the findings of this study suggest that workplace bullying could be viewed from the traits' perspective, and that the characteristics of bullies resemble the

descriptions of individuals with low scores on openness to experience, agreeableness, and conscientiousness; and elevated scores on neuroticism and extraversion. More specifically, the Big-Five traits are significant factors that could correctly classify perpetrators and non-perpetrators of workplace bullying in this study. It could be suggested that the Big-Five model is useful in exploring the influence of personality traits on tendency to perpetrate bullying. From practical angle, the findings imply that intervention programmes aimed at reducing workplace bullying among academics should focus on personality modification using the elements incorporated in cognitive-behavioural theory.

Lastly, the study has some limitations which include the following: 21% of variance in workplace bullying was accounted for by the Big-Five personality traits. Other factors that were not examined in this study may account for the remaining 79%. This calls for more investigations to discover more predictors. Also, data for this study were collected from few public universities and from one region in Nigeria. The extent to which these findings generalise to other universities is unknown. This study was based on a cross-sectional survey, and the causality among the constructs may not be appropriately considered. Also, for the measures, reflective self-reporting of the participants might bias the outcomes obtained. Future research should utilise more objective methods. Lastly, no intervening variables were considered. Finally, not minding the limitations, the findings have implications for development of anti-bullying interventions in Nigeria universities and beyond.

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Appendix I Adapted Version of NAQ-R that was used to measure bullying

Instruction: In the past three (3) months, how often have you done each of the following acts to someone in your workplace?		Components		
S/N	Items	1	2	3
1.	Withholding information which affects someone's performance.	.76	-.06	-.06
2.	Humiliating or ridiculing someone in connection with his/her work.	-.05	.74	-.05
3.	Ordering someone to do work below his/her level of competence.	.61	-.02	-.02
4.	Removing or replacing someone's key areas of responsibility with more trivial/unpleasant tasks.	-.17	.79	-.17
5.	Spreading of gossip and rumours about someone.	.59	.73	-.53
6.	Ignoring, excluding someone.	-.07	.72	-.52
7.	Insulting or making offensive remarks about someone (i.e. habits and background), attitudes or private life.	.02	.72	-.52
8.	Shouting at someone or using him/her as the target of spontaneous anger.	.05	.50	.70
9.	Intimidating someone by behaviour such as finger-pointing, invasion of personal space, or shoving, blocking/barring the way.	.48	-.07	.77
10.	Hinting or signalling at someone that he/she should quit his/her job.	.03	.74	-.44
11.	Repeatedly reminding someone of his/her errors or mistakes.	.10	.66	.16
12.	Ignoring someone or showing a hostile reaction when s/he approaches.	-.08	.73	-.09
13.	Persistent criticism of someone's work and effort.	.10	.83	-.63
14.	Ignoring someone's opinions and views.	.89	-.51	.18
15.	Making practical jokes about someone you don't get on with.	.12	.77	.27
16.	Given someone tasks with unreasonable or impossible targets or deadlines.	.03	-.57	-.57
17.	Making allegations against someone.	-.07	.20	.19
18.	Excessive monitoring of someone's work.	.76	.16	.16
19.	Pressurised someone not to claim something which by right S/he is entitled to (sick leave, holiday, entitlement, travel expenses).	.77	-.15	-.15
20.	Making someone the subject of excessive teasing and sarcasm.	-.03	.83	-.03
21.	Exposing someone to unmanageable work load.	.83	-.00	-.40
22.	Threatening someone with violence or physical abuse.	.10	.07	.74

Note: Principal Component Analysis was used to extract 3 components.