

ROLES OF BIG FIVE PERSONALITY TRAITS, LOCUS OF CONTROL AND ASSERTIVENESS IN PERCEIVED ACADEMIC MENTORING AMONG STUDENTS

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ABSTRACT

Effective mentoring is needed in order to make substantial progress in training programmes and professional practice. One key population for mentoring are undergraduate students because they constitute a valuable part of the youth who will transit to become professionals in future. There is limited research on mentoring in Nigerian higher educational institutions. This study investigated the roles of Big Five personality, locus of control and assertiveness in perceived academic mentoring among undergraduate students. Participants were 603 final year students of the University (305 males and 298 females) of Nigeria Nsukka campus ($M_{age} = 23.26$ years, $SD = 3.09$). They completed the Big Five personality Inventory (BFI), Locus of Control Behaviour Scale, Assertiveness Behaviour Inventory, and Mentoring Scale. Hierarchical multiple regression was used for data analysis. It was found that extraversion, agreeableness, conscientiousness, and neuroticism did not significantly predict perceived mentoring. Openness to experience, positively predicted perceived mentoring. Locus of control positively significantly predicted perceived mentoring, but assertiveness did not significantly predict perceived mentoring. Interventions to improve externally-oriented control beliefs among students was suggested as a way of enhancing their mentoring behaviours, and the need for further studies on the variables using participants from multiple backgrounds to ascertain the extent to which the findings can be generalised to other student populations.

Keywords: Assertiveness, locus of control, mentoring, personality, undergraduate students.

INTRODUCTION

Tertiary institutions, particularly universities, have been facing significant increase in poor academic achievement and drop-out (Ella, Akpabio, & Samaon-Akpan, 2015). This has been attributed to many factors including inability to meet university academic standards, inability to adapt to a new social and academic environment, changes in personal goals and aspirations, lack of motivation and clearly defined goals, priority of other commitments such as work or family, financial difficulty, or incongruence between an institution's orientation and approach (Opayemi, 2012). Mentoring is one of the strategies that have been devised to strengthen students' learning and it is increasingly gaining currency as a salient strategy to help students to adjust to university life, improve their learning experience and reduce attrition rates of those who are vulnerable (Colvin & Ashman, 2010; Goff, 2011; Mckeller & Kempster, 2017; Felipe et al., 2017). Crisp (2009) defined mentoring as support provided to college students that entails emotional and psychological guidance, help succeeding in academic coursework, assistance in examining and selecting degree and career options, and the presence of a role model by which the student can learn from and copy their behaviors relative to college going.

Mentoring content includes counseling on academic support, refining goal and aspirations on one's academics and career, solving personal anxiety and overcoming psychosocial challenges (Hur et al., 2018). Baranik, Wright and Reburn (2017) asserted that mentoring relationships may help students succeed in academics tasks by meeting core psychosocial needs provided in the mentoring relationship. This implies that mentoring may foster positive exposure, prioritization, focus and building of academic culture through which the student could be enhanced to have a better understanding of how to set academic goals and place performance targets,

enriching personal standards as he/she thrives through university. Although, mentoring has been recognized as important for retention and academic enrichment of undergraduate students (Baier, 2014), many students seem often unwilling to seek for it and some lecturers tend to be unwilling too, to take on mentoring roles in their academic career (Anderson et al., 2016). This situation underscores the need to further explore more of possible mentee characteristics that may be associated with the quality of the mentoring relationship, the perceived contribution of mentoring, and its outcomes.

There is an array of available literature on mentoring in several areas like career mentoring in industrial and organizational settings, and professional formal mentoring in hospital and clinical setting yet, just a very few research exists in the field of academics especially as it involves undergraduate mentoring (Sulphay & Allam, 2017). The current study examines the contributions of Big Five personality, locus of control and assertiveness in undergraduate students' perception of academic mentoring.

Personality is generally defined as the relatively stable dispositions (traits) of individuals that contribute to consistency in their thoughts, behaviours, and emotions (Funder, 2001). The "Big Five" model of personality provides the most appealing framework for understanding a wide range of behaviours in terms of five broad personality traits (Neff et al., 2011). The five dimensions of the Big Five model include: Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. Openness to experience refers to factors as breadth of interests, tolerance of range of values, emotional flexibility and receptivity to new experiences and ideas (Srivastava et al., 2022). Conscientiousness consists achievement orientations (the degree to which it is important for individuals to succeed and to which degree they are willing to work to achieve results) and dependability (thoroughness, orderliness and follow-through) (Bozionelos, 2004; Costa & McCrae, 1992; Costa & McCrae, 2004; Lee et al., 2000). Extraversion refers to qualities as sociability, activity level, assertiveness and positive emotions. Less extroverted people tend to be more reserved, are less likely to experience positive feelings and have a lower energy level (Costa & McCrae, 2019). Agreeableness pertain to interpersonal behaviors related to friendliness, trustworthiness, altruism and flexibility in dealing with others (Veselka et al., 2017). Neuroticism (or emotional stability) describes the degree to which people experience negative emotions such as anxiety, depression, anger, inhibition, focus on the self, and self-consciousness. Individuals that are highly emotionally stable are calm and even-keeled, while those low on emotional stability feel stressed and upset (Ormel et al., 2013). Understanding how a mentee's personality influences their experience of mentoring can help mentors tailor their approach to better meet the mentee's needs or moderate the needs, and therefore, promote a more effective mentoring relationship (Onyemoru et al., 2016).

Available literature suggests that that certain personality traits in people may make them more or less likely to benefit from mentoring relationships (Ayodele et al., 2014; Copeland et al., 2017; Goldner, 2015; Larose et al., 2009; Sunderhaus, 2012; Mohabuth, 2015). For example, a mentee who is open to feedback and receptive to new ideas may be more likely to benefit from mentoring than a mentee who is resistant to change or closed off to new perspectives. Menges (2016) found that openness to experience and conscientiousness matter for mentoring support while extraversion, agreeableness and neuroticism do not. Extroversion, conscientiousness, and openness to experience are positively correlated with participation as a mentor while agreeableness and neuroticism did not predict involvement as a mentor (Niehoff, 2006). There is no significant impact of agreeableness on psychosocial mentoring (Schuster, Ambrosius, & Bader, 2017). However other studies showed that there was no trend tying openness or conscientiousness to reported relationship satisfaction in mentoring relationship (Lim, 2018). Nikos et al., (2014) found that association of openness to experience and agreeableness with

mentoring receipt was of inverted U-shape, such that the benefits of being open and agreeable for mentoring receipt ceased to exist at high values of these traits.

Apparently, findings on the relationship between personality precisely, Big-Five Personality model and mentoring seem inconsistent. Moreover, available literature show most of these studies were not done among the undergraduate population and not within the Nigerian setting, and the mentor protégée relationship they examined were mostly not academic mentoring. In addition, none of such previous studies combined all components of the Big-Five personality Model and the other variables of interest such as in the present study to give a clearer nature of their relationship. Consequently, the present study was conducted to fill this gap in literature. We thus hypothesised that openness to experience, conscientiousness, extraversion, agreeableness and neuroticism will positively predict academic mentoring among undergraduate students.

Another factor of interest in this study is locus of control. Locus of control refers to the extent to which individuals believe that they can control events that affect them (Rotter, 1954). It depicts an individual's perception of the main causes of events in life (Igbeneghwa & Popoola, 2011). It refers to the individual's beliefs about whether he/she can control the outcomes in his/her life (internal locus of control) or the outcomes are controlled by factors such as luck and other people (external locus of control) (Rotter, 1966). In general, internal locus of control and external locus of control are the dimensions of the construct, but Rotter (1975) posits that internality and externality represents two ends of a continuum, not an either/or typology. Student's locus of control orientation reflects in their academic outcomes (Chukwuorji et al., 2018; Miller & Ham 2020). In China, there was a positive relationship between protégés' internal locus of control and the extent of mentoring functions they reported receiving (Wang et al., 2010). Internal locus individuals tended to be proactive than the external locus consequently they were likely to seek for mentoring relationship (Demir et al., 2014). Students with internal locus of control also benefited better than the external locus ones in mentoring (Demir et al., 2014; Ochieng, 2021; Opayemi, 2012). Although these earlier studies have indicated that locus of control is related to academic mentoring, the nature of the relationship with all components of the Big –Five personality model and assertiveness is still unclear. This study hypothesised that locus of control will significantly positively predict academic mentoring among undergraduate students in Nigeria.

Assertiveness is an honest expression of self, devoid of aggression, anxiety, and passivity, with the view to achieving the best from interpersonal exchange without infringing the rights of others and to be able to control aggressive impulses (Immanuel, 2019; Peneva & Mavrodiev, 2013). Okoli (2002) defined assertiveness as the proper expression of emotion other than anxiety, openness, directness, spontaneity and appropriateness. Assertive individuals resist undue social influences, disregard arbitrary authority figures, and refuse to conform to arbitrary group standards (Okechi et al., 2013). Assertive behaviour is a good characteristic needed for effective academic mentoring (Bickram, 2019; Makinde & Akintaye, 2014). Studies among Australian students (Hanson et al., 2020), American job seekers (O'Mally & Antonelli, 2016), Greek women (Apospori et al., 2006) and Irish nursing students (Begley & Glacken, 2004) showed that assertiveness helps in seeking and developing mentoring relationships. The available studies on assertiveness-academic mentoring relationship were not in the Nigerian setting. Moreover, there is a dearth of studies in which personality, locus of control and assertive behaviour were combined to determine the extent to which they can predict academic mentoring of undergraduates. The current study hypothesised that assertiveness will significantly positively predict perceived academic mentoring of undergraduate students.

METHOD

Design and Statistics

This study was carried out using survey method and it employed a cross-sectional design. Hierarchical multiple regression was used to find out the impact of the independent variables if the independent variables will predict the dependent variable which is perceived academic mentoring. Among other benefits, the regression would show the change in R value on the dependent variables as the independent variables are added.

Participants

Participants in this study comprised 603 undergraduate students of University of Nigeria, Nsukka. Five faculties were randomly selected, namely, Education (64), Social Science (187), Engineering (41), Biological Sciences (79), Medical Sciences (69), Art (73), Physical Sciences (22), Health Sciences (26) and Agriculture (42). Participants consisted of final year students in full time/regular programs in the selected faculties. The final year was chosen basically, considering that they have been in the school for many years and are writing their project which draws them closer to lecturers for guidance, support, counseling and formal supervision. Age range was 21–45 years ($M = 23.27$, $SD = 3.09$) There were (305) males and (298) females participants.

Instruments

Big Five Personality Inventory (BFI)

The BFI (John et al., 1991) assesses the Big Five personality factors (and underlying facets) (John et al., 1991; John et al., 2008). Sample items in the BFI includes I see myself as: Someone who is full of energy (Extraversion), someone who has a forgiving nature (Agreeableness); someone who is a reliable worker (Conscientiousness); someone who gets nervous easily (Neuroticism); someone who is inventive (Openness to experience). The developers (1991) reported a Cronbach α of .80 and a 3-month test-retest reliability of .85 for the BFI, as well as mean convergent validity coefficients of .75 and .85 with the Big five Instruments by Costa and McCrae (1992) and Golberg (1992), respectively. In a Nigerian sample, Umeh (2004) obtained the following divergent validity coefficients with University Maladjustment Scale (Kleinmontz, 1961): Extraversion = .05, Agreeableness = .13, Conscientiousness = .11, Neuroticism = .39 and Openness to Experience = .24. According to Umeh (2004), the low correlation coefficients obtained when the scores of the participating students on the BFI was correlated with their scores on the Maladjustment Scale shows the divergent nature of the two instruments. Thus, it is an evidence of BFI's cross-cultural validity. In another study in Nigeria, Alansari (2016) reported satisfactory internal consistency for the Neuroticism ($\alpha = .82$ for females and .74 for males), Extraversion ($\alpha = .79$ for females and .83 for males), and Openness to

Experience ($\alpha = .82$ for females and $.85$ for males), Agreeableness ($\alpha = .82$ for females and $.81$ for males), and Conscientiousness ($\alpha = .90$ for females and $.92$ for males) subscales respectively.

Locus of Control Behaviour Scale

LCBS (Craig et al., 1984) consists of 17 items designed to measure internality and externality of control. Items are scored on a 6-point Likert format of Strongly disagree (0), to Strongly agree (5). High score indicates internal locus of control while low score indicates external locus of control. A Cronbach's α of internal consistency of $.79$ was reported (Craig et al., 1984). Studies in Nigeria had demonstrated that the LOCBS has good reliability and validity (e.g., Chukwuorji, et al., 2018; Ibeagha et al., 2004; Okechi et al., 2013). The scores can be between 0 (indicating an internal locus of control) and 85 (indicating an external locus of control).

Assertive Behaviour Assessment Scale (ABAS)

The ABAS (Onyeizugbo, 1998, 2003) is an 18-item measure of assertiveness. The items are scored on a 5-point likert response format ranging from 1 (Never) to 5 (Always). There are direct-scored items (1, 3, 5, 6, 8, 12, 18), and reverse-scored items (2, 4, 7, 9, 10, 11, 13, 14, 15, 16, 17). Onyeizugbo (2003) reported a Cronbach's α of $.76$, and a split-half reliability coefficient of $.69$ which rose to $.82$ when corrected with the Spearman-Brown correction formula. A principal component factor analysis also demonstrated a single factor structure for ABAS. Higher scores indicate higher assertiveness.

The Mentoring Scale (MS)

The MS (Dreher & Ash, 1990) is a global measure of mentoring experiences. The goal of the developers was to construct a global measure that is representative of, in a sampling context, the career and psychosocial functions of mentoring described in extant literature (e.g., Kram, 1985). Since the MS was originally developed for use among working populations, the present author modified items that contain such words as company (university), managers (lecturers) and job (studies) to make them applicable to students. The intercorrelation matrix corresponding to the 18-item mentoring scale and the results of an exploratory factor analysis of the one-factor matrix were good (see Dreher & Ash, 1990). The α for the scale was $.95$. For the present study, the Kaizer-Meyer Olkin (KMO) value was $.86$ and the Bartlett's Test of Sphericity was 1010.484 ($p < .001$), indicating sampling validity adequacy fit for further analysis. All the items loaded on one factor with values above $.34$, explaining 27.40% of the variance in the scale. The α was $.87$. A total mentoring score is derived by calculating the responses on the 18 items for each respondent.

Procedure

The questionnaire for the data collection was administered to the participants in a quiet classroom setting using convenient model sampling. The researcher and 4 trained research assistants were present to address any questions raised by the students. Students who willingly consented to participate in the research were given the questionnaire for completion. They were assured that their responses will be confidential and anonymous since no form of identification is required on the questionnaires. A total of 650 questionnaires were distributed, only 620 copies were returned but among the 620 returned, 17 copies were not appropriately responded to so, were discarded.

RESULTS

Table 1: Correlations of demographic variables, big five personality factors, locus of control, assertiveness and perceived mentoring

Variables	1	2	3	4	5	6	7	8	9	10
1 Age	-									
2 Gender	-.08	-								
3 Income	.05	-.03	-							
4 Extraversion	.13**	-.06	.06	-						
5 Agreeableness	-.13**	-.05	-.01	.00	-					
6 Conscientious	-.02	-.09*	-.08	.05	.35***	-				
7 Neuroticism	-.03	.12**	.02	-.07	-.19***	-.23***	-			
8 Openness	.00	-.04	.07	.02	.20***	.20***	-.19***	-		
9 Locus of Control	-.15**	-.02	.03	.10*	.23***	.22***	-.06	.12**	-	
10 Assertiveness	-.05	.02	.03	.09*	.24***	.26***	-.18***	.14***	.22***	-
11 Mentoring	.01	.00	.07	.09*	.10*	.12**	-.14**	.24***	.16***	.11**

Note *** $p < .001$; ** $p < .01$; * $p < .05$; Gender (0 = Male, 1 = Female); Income (0= Below N10, 000, 1 = N10, 000-N49, 000, 2 = N50, 000-N99, 000, 3 = N100, 000-N200, 000; 4 = Above N200, 000)

In Table 1, being older in age was associated with being more extroverted, but low in agreeableness and more external locus of control. Female gender was associated with lower conscientiousness and higher neuroticism. Extraversion was positively related to internal locus of control and assertiveness. Agreeableness correlated positively with conscientiousness, openness to experience, internal locus of control and assertiveness, but it had a negative relationship with neuroticism. Conscientiousness was negatively correlated with neuroticism, and was positively related to openness to experience, internal locus of control, and assertiveness. Openness to experience was positively associated with internal locus of control and assertiveness. Internal locus of control was associated with assertiveness.

Table 2: Hierarchical multiple regression predicting perceived mentoring by personality, locus of control, and assertiveness

Predictors	Step 1			Step 2			Step 3		
	B	B	T	B	B	T	B	β	t
Extraversion	.19	.08	1.94	.16	.07	1.66	.16	.06	1.60
Agreeableness	.04	.02	.49	.00	.00	.03	-.00	-.00	-.08
Conscientiousness	.11	.05	1.22	.07	.04	.81	.03	.03	.68
Neuroticism	-.21	-.07	-1.79	-.22	-.08	-1.87	-.07	-.07	-1.78
Openness to experience	.45	.21	5.17***	.44	.21	5.01***	.20	.20	4.96***
Locus of Control				.18	.12	2.87**	.11	.11	2.73**
Assertiveness							.03	.03	.80
R^2	.08			.09			.09		
ΔR^2	.08			.01			.00		
F	9.87(5, 597) ***			6.70(6, 596) ***			8.40(7, 595) ***		
ΔF	9.87(5, 597) ***			8.25(1, 596) **			.65(1, 595)		

** $p < .01$; *** $p < .001$; ΔR^2 = Change in R^2 ; ΔF = Change in F

Results of the hierarchical multiple regression for the test of the hypotheses is shown in Table 2. The Big Five Personality factors were added in the Step 1 of the regression analysis. The contribution of personality in explaining the variance in perceived mentoring was 8% ($R^2 = .08$), and the model was significant, $F(5, 597) = 9.87, p < .001$. Specifically, extraversion $\beta = .08$,



$t(603) = 1.94$, agreeableness $\beta = .02$, $t(603) = .49$, conscientiousness $\beta = .05$, $t(603) = 1.22$ and neuroticism $\beta = -.07$, $t(603) = -1.79$ did not significantly predict perceived mentoring. However, openness to experience positively predicted perceived mentoring, $\beta = .21$, $t(603) = 5.17$, $p < .001$. The unstandardized regression coefficient (B) showed that each one unit rise in openness to experience was associated with .45 increase in perceived mentoring.

In step 2, the contribution of locus of control in explaining the variance in perceived mentoring was 8% ($\Delta R^2 = .08$), and the model was significant, $\Delta F(1, 596) = 8.25$, $p < .01$. Locus of control positively predicted perceived mentoring, $\beta = .12$, $t(603) = 2.87$, $p < .01$. The unstandardized regression coefficient (B) showed that each one unit rise in the scores on Locus of Control Behaviour Scale (representing internal locus of control) was associated with .18 increase in perceived mentoring.

Step 3 indicated that assertiveness did not significantly predict perceived mentoring, $\beta = .03$, $t(603) = .80$. The contribution of assertiveness in explaining the variance in perceived mentoring was 0% ($\Delta R^2 = .00$), and the model was not significant, $\Delta F(1, 595) = .65$.

DISCUSSION

Several researches have been carried out on the construct of mentoring, but they are mostly in other populations such as workers, and few research have investigated the role of big five personality, locus of control and assertiveness in perceived academic mentoring among undergraduate students. Thus, this study examined whether big five personality, locus of control and assertiveness predict students' perceived academic mentoring. Results revealed that openness to experience positively predicted perceived academic mentoring. Based on this finding, the hypothesis which stated that openness to experience would significantly and positively predict perceived academic mentoring of undergraduates was confirmed. This means that students who have the trait of openness are more disposed to engaging in interpersonal relationships such as mentoring as the trait of openness to experience would make them have the willingness to either initiate a mentoring relationship or accept call for mentoring from a would be mentor; as it has been identified as the best predictor for interventions seeking because individuals high in openness appear to be willing to take new challenges and open to several new experiences to enrich their learning (Karen & Richard 2008). These individuals are usually curious and willing to seek out even unconventional innovative ideas to make sure knowledge is experientially rich.

Previous research (e.g., Goldner, 2015) reported that openness to experience positively associated with mentoring and adjustment in social and academic life at the end of mentoring. According to Goldner (2015), mentees with openness to experience were seen to adjust in their social and academic lives at the end of mentoring. Openness to experience matters for psychosocial and career mentoring support (Menges, 2016) and it is associated with active engagement in three domains of endeavor which are social, task and idea-related (see, Ashton & Lee, (2001). Mentoring creates a platform for individuals to be engages in these three domains. However, the finding is not consistent with some other research (e.g., Nikos et al., 2014) who found that being open for mentoring receipt ceased to exist at high value of the trait of openness to experiences. An extremely high level of the trait may lead to the quest for unhealthy level of interaction which may be at the detriment of the relationship objectives and can impede mentoring relationship. Additionally, openness personality trait has been reported to have greater relevance in the individualistic cultures (see Triandis & Suh, 2002) in contrast to the collectivist culture in Nigeria where a high level of openness trait is perceived as distracting (Ridhi & Sandtosh, 2016).

The hypothesis which stated that conscientiousness would significantly predict perceived academic mentoring of undergraduates was not supported, as the findings of this study revealed that conscientiousness did not significantly predict perceived academic mentoring of

undergraduates. This is in agreement with a recent research, Lim (2018) which reported no trend tying conscientiousness and mentoring relationship. This is possible because individuals with this trait may be seen to be directors of their own destiny; they are optimistic and always feel able to surmount barriers on their own and find alternative routes to gain their goals (Karen & Richard, 2008). On the contrary, the finding of this study does not agree with some other research findings (e.g., Turban et al., 2017; Nikos et al., 2014) where conscientiousness demonstrated exclusively positive relationship with mentoring. Students with the trait of conscientiousness are usually dutiful, achievement oriented and competent thus more congenial in mentoring relationship (see Morrison, 2009).

The hypothesis which stated that extraversion would significantly predict perceived academic mentoring was not confirmed, as the results showed that extraversion did not significantly predict perceived academic mentoring. The finding of this study is consistent with Menges (2016) in which extraversion did not predict mentoring relationship; and in another study where extraversion was not predictive of mentoring relationship (Camps et al., 2016). Though the trait of extraversion may be useful in mentoring relationship, a high level of the trait to an extent can hamper the mentor mentee relationship (see Bozionelos et al., 2014). This is understandable as most mentors would perceive individuals with such trait to provoke abusive mentoring (Henle & Gross, 2014). Moreso, unlike in individualistic cultures, in the Nigerian collectivist culture where there is high regard for respect to elders, it is expected that higher authorities should be approached and addressed with much formality; the mentor is seen as superior and the student will need to use much formality to address and communicate on issues even in a mentor-mentee relationship. Otherwise, the individual may be misperceived by the mentor as disrespectful and just instinctively seeking to be in the company of superiors.

The hypothesis which stated that agreeableness would significantly positively predict academic mentoring was not confirmed, as the findings of this study revealed that agreeableness did not significantly predict perceived academic mentoring among undergraduates. Goldner (2015) reported that mentees' agreeableness was positively associated with the quality of mentoring; but more recent research results corroborate that agreeableness was not a predictor of mentoring relationship (Arora & Rangnekars, 2016; Camps et al., 2016; Niehoff, 2006). Agreeableness has aspects that could motivate as well as suppress an individual's interest in mentoring (Niehoff, 2006). The aspects of altruism and building trust may facilitate mentoring as the individual will tend to be self-sacrificing and humble, but the aspect of compliance even when an individual is motivated in situations where he or she can scarify self and build trust, the inherent tendency towards compliance is likely to prevent the person from moving into a mentoring relationship. The major motive of agreeable individual is usually affiliative, and has been found to be negatively associated with the willingness to engage in mentoring (Judge, 2002). So, if engagement in mentoring relationship is voluntary, the individual will not be willing to engage in mentoring but if it is a compulsory scheme in an official setting in compliance the individual will have tendency to yield to the official orders.

The result of the study revealed that neuroticism did not predict perceived academic mentoring among undergraduate. Thus, the hypothesis which stated that neuroticism would significantly predict perceived academic mentoring was not confirmed. This finding is understandable as individuals with limited social skill and have reactive nature will not be congenial in mentoring relationship (Morrison, M. 2009). The finding of this study is consistent with previous research (e.g., Menges, 2016; Niehoff, 2006) which revealed no relationship between neuroticism and mentoring; meaning that both individuals at high or low levels of neuroticism were equally likely not to differ participating in mentoring. This is because there are chances of a mix in the peering of the dyads; highly neurotic students sometimes may meet or be peered in a formal mentoring with mentors with similarly high neurotic traits too, and this could



facilitate mutual understanding but may as well have limits to the benefits in the relationship at a point because there will be some negativity emotions that will be unlikely to facilitate personal growth in the relationship. On the other hand, if they are both low in neuroticism, there may be slim chances to consider and address emotional regulation strategies that will be vital to mentoring and well-being of the mentoring relation see, (Cote, 2014). Thus, in mentoring relationship predictive role of neuroticism may be offset by peering and similarity and dissimilarity in the levels of the trait, leading to an overall null effect for the trait on perceived mentoring.

The hypothesis which stated that locus of control would significantly positively predict perceived academic mentoring of undergraduates was supported in this study, as the findings showed that locus of control positively predicted perceived mentoring, showing that increasing level of internal locus of control was associated with increase in perceived mentoring among undergraduates. The finding of this study corroborates previous research findings (e.g., Opayemi, 2012) in which locus of control significantly and independently predicts mentoring relationship. Mentees who have internal locus of control would more likely get involved in mentoring relationship than those who had external locus of control. Increase in internal locus of control was associated with students' mentoring seeking behaviour and mentoring program increased students' internal locus of control. (Demir et al., 2014). Based on Rotter's (1966) expectancy component in the social learning theory, behaviour is proposed to determine not only the consequences (positive reinforcers) but also the expectation that a particular behaviour will result in those consequences (Mischel et al., 2004). Thus, a student's locus of control orientation reflects his/her learning attitude and responsibility allocation for learning in mentoring relationship. Therefore, internal locus of control signifies that the student accepts personal responsibility for learning under the mentor while the external locus of control means that he/she has little control on learning (Rinn et al., 2014).

The last hypothesis which stated that assertiveness would significantly positively predict perceived academic mentoring was not confirmed as the result revealed that assertiveness did not significantly predict perceived academic mentoring among undergraduates. This may seem surprising but interpersonal assertiveness seems to have a mixed picture. One may think that assertiveness behaviour should help in interpersonal relationship as it could enhance communication system in the dyad. People who have mastered assertiveness skill are assumed to greatly reduce the level of mentoring initiation anxiety and the inherent clashes in mentoring process; this is in line with behavioural theory of Wolpe (1949) that assertive behaviour is an anxiety inhibitor. However, it is pertinent to note that we live in a culture where it seems being assertive is not always helpful; some superiors may perceive it as being too fast or antagonistic, in some contexts. The finding of this study is in line with the finding of (Wang, Zhao & Foo 2013). This can be understood from the possible influence of cultural context and the emanating variance in cultural perception of interpersonal assertiveness behaviour (Ames, 2009; Wang et al., 2013). Assertiveness behaviour may not be homogenously perceived across cultures; even in the same country, there may be several dimensions which may be incongruent with the other.

Assertiveness has to do with expression and communication strategy of the mentee. Based on Kalbfleisch (2002) mentoring enactment theory, the initiation, building up, maintenance and repair of the mentoring relationship is basically placed on assertiveness behaviour of the mentee. Individuals from high assertive cultures are more direct and have tendency to argue and disagree with each other's opinion. In contrast, people from low assertive cultures prefer to communicate indirectly and try to save face (Wang et al., 2013; Javidan et al., 2006). High assertiveness societies seem to have a can-do attitude and love competition (House, 2001). They emphasize results over relationships, so they attempt to exercise control, act opportunistically, and think of others as opportunistic (Den Hartog, 2004).



Implications of the Findings of the Study

This study contributes to existing research, builds upon it and takes a meaningful step towards rectifying an apparent dearth in the literature. Closing this gap within mentoring research is an important step to understand the underlying factors that predict mentoring relationships, especially regarding the facets of the big five personality, locus of control and assertiveness in perceived academic mentoring among undergraduates in universities. It adds to a better understanding of mentoring relationship and as well provides university mentoring lecturers with guidance for enhancing effective mentoring of undergraduates. Thus, researchers and university faculties' stakeholders should consider the facets of big five personality, locus of control and assertiveness behaviour of students in the initiation, maintenance and building up of mentoring relationship for undergraduates.

Understanding that individuals with broad interest and receptivity to new experiences and ideas are more likely to participate in mentoring, the practical implication of this finding is that openness can be included among the criteria for mentor selection in formal mentoring schemes in the university. Nigerian universities should develop programs for undergraduates to address the issues of peer influence, academic persistence as a way of improving students' internal locus of control. This can be achieved through consistent and intensive orientations, developmental course works, advising, counseling and mentoring.

Limitations of the Study and Suggestions for further study

Although this study makes some important contribution to knowledge on academic mentoring, there are some notable weaknesses. One, it is cross-sectional research and it has all weaknesses inherent to this type of research design. Secondly, it did not collect data of mentors. It took data of mentees only. Thirdly, the study was done in a single university in the southeast. Further research should continue to investigate the impact of mentors' personality traits on the mentoring relationship of undergraduates as this study concentrated majorly on the different facets of the big five personality, locus of control and assertiveness of undergraduate mentees. The research also recommends subsequent researchers to further examine similarities and discrepancies between the mentee personality and mentors' personality.

Conclusion

Findings of this study established the importance of openness to experience and internal locus of control in mentee among undergraduates. There is need to consider openness to experience among the criteria for selection and matching of mentors and mentees. Moreover, knowing that, increasing levels of internal locus of control is associated with increase in perceived mentoring, stakeholders and faculties in Nigerian universities should organize programs to help students build internal locus of control and develop the trait of openness to experience for optimal benefits in academic mentoring relationships. To achieve this, universities should introduce intensive orientations, effective advising and counseling for students to build up the traits of openness to experience and internal locus of control as these will enable efficient undergraduate mentoring.

REFERENCES

- Alansari, B. (2016). The Big Five Inventory (BFI): Reliability and validity of its Arabic translation in non clinical sample. *European Psychiatry*, 33(S1), S209-S210. doi:10.1016/j.eurpsy.2016.01.500
- Anderson, K. A., Bykovskiy, A. G., & Lyles, A. A. (2016). The value of preparing PhD students as research mentors: Application of Kram's temporal mentoring model. *Journal of Professional Nursing*, 32(6), 421-429.
- Apospori, E., Nikandrou, I., & Panayotopoulou, L. (2006). Mentoring and women's career advancement in Greece. *Human Resource Development International*, 9(4), 509-527.
- Arora R., & Rangnekar, S. (2016). Relationships between emotional stability, psychosocial mentoring support and career resilience. *Europe's Journal of Psychology*, 11(1), 16–33.
- Ashton, M. C. & Lee, K. (2001). "A theoretical basis for the major dimensions of personality", *European Journal of Personality*, 15(3), 27-53.
- Baier, S. T. (2014). The role of academic factors, self-efficacy, mentoring relationships, and learning communities in persistence and academic success of freshmen college students. *Wayne State University Dissertations*. Paper 870.
- Baranik, L. E., Wright, N. A., & Reburn, K. L. (2017). [Mentoring relationships in online classes](#). *The Internet and Higher Education*, 34, 65-71.
- Begley, C. M., & Glacken, M. (2004). Irish nursing students' changing levels of assertiveness during their pre-registration programme. *Nurse Education Today*, 24(7), 501-510.
- Bickram, S. (2019). *A Quantitative Analysis between Anger and Assertiveness Communication Styles among Online Students* (Doctoral dissertation, Keiser University).
- Bozionelos, N. (2004). Mentoring provided: Relation to mentor's career success, personality, and mentoring received. *Journal of Vocational Behavior*, 64(1), 24-46.
- Camps, J. Stouten, J. & Euwema, M. (2016). The relationship between supervisors' big five personality traits and employees' experiences of abusive supervision. *Frontiers in Psychology*. 7(112) 1-11.
- Chukwuorji, J. C., Ituma, E. A., & Ugwu, L. E. (2018). Locus of control and academic engagement: Mediating role of religious commitment. *Current Psychology*, 37, 792–802. doi: 10.1007/s12144-016-9546-8.
- Colvin, J. W., & Ashman, M. (2010). Roles, risks, and benefits of peer mentoring relationships in Higher Education. *Mentoring & Tutoring: Partnership in Learning*, 18(2), 121-134.
- Copeland, K., Martin Jr., R. M., Fale, E. D., McIntire, L., & Curran, T. (2017). *The effect of personality on mentoring*. Presented at the Annual Mentoring Conference, University of New Mexico Mentoring Institute at Albuquerque, New Mexico, USA.
- Costa, P. T., & McCrae, R. R. (2004). A contemplated revision of the NEO five-factor Inventory. *Personality and Individual Differences*, 36(3), 587–596.
- Cote, S. (2014). Emotional intelligence in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 459-488.



- Craig, A. R., Franklin, A. J., & Andrews, G. (1984). A scale to measure locus of control behavior. *British Journal of Medical Psychology*, 57, 173-180.
- Crisp, G. (2009). Conceptualization and initial validation of the college student mentoring scale. *Journal of College Student Development*, 50, 177-194.
- Crisp, G., & Cruz, I. (2009). Mentoring college students: A critical review of the literature between 1990-2007. *Research in Higher Education*, 50(6), 525-545. doi:10.1007/s11162-009-9130-2.
- Demir, S., Demir, S. G. Bulut, H., & Hisar, F. (2014). The effect of mentoring program on ways of coping with stress and locus of control for nursing students *Asian Nursing Research*, 8, 254-260.
- Dreher, G. F., & Ash, R. A. (1990). A comparative study of mentoring among men and women in managerial, professional, and technical positions. *Journal of Applied Psychology*, 75(5), 539-546.
- Ella, R. E., Akpabio, I. I., & Samaon-Akpan, P. E. (2015). Influence of study habit on undergraduate nursing student's academic performance in University of Calabar, Nigeria. *American Research Journal of Nursing*, 1(3), 1-6.
- Felipe, A. A., Garcia, J. D., Sanchez, L. A. I., Luordo, D., & Garcia, G. D. S. (2017). Teaching the basics of echocardiography in the undergraduate: Students as mentors. *Revista Clinica Espanola (English Edition)*, 5, 245-251.
- Funder, D. C. (2001). Personality. *Annual Review of Psychology*, 52, 197-221.
- Goff, L. (2011). Evaluating the outcomes of a peer-mentoring program for students transitioning to postsecondary education. *The Canadian Journal for the Scholarship of Teaching and Learning*, 2(2),1-12.
- Goldner, L., & Scharf, M. (2015). Attachment security, the quality of the mentoring relationship and proteges' adjustment. *The Journal of Primary Prevention*, 35(4), 267-279.
- Hanson, J., Walsh, S., Mason, M., Wadsworth, D., Framp, A., & Watson, K. (2020). 'Speaking up for safety': A graded assertiveness intervention for first year nursing students in preparation for clinical placement: Thematic analysis. *Nurse Education Today*, 84, 104252.
- Henle, C. A., & Gross, M. A. (2014). What have I done to deserve this? Effect of employee personality and emotion on abusive supervision. *Journal of Business Ethics*, 122, 461- 474.
- House, M. R. J. 2001. Lessons from project globe. *Organizational Dynamics*, 29: 289-305.
- Hur, Y., Cho, A. R. & Kim, S. (2018). Exploring the possibility of one-on-one mentoring as an alternative to the current student support system in medical education. *Korean Journal of Medical Education*, 30(2), 119-130.
- Ibeagha, P. N., Balogun, S. K., & Adejuwon, G. A. (2004). Resilience of inner-city Yoruba university undergraduates in south western Nigeria. *Kamal-Raj Studies of Tribes and Tribals*, 2(2), 125-129.
- Igbeneghu, B. I., & Popoola, S. O. (2011). Influence of locus of control and job satisfaction on organizational commitment. *E-Journal of Library Philosophy and Practice e-journal*, 575, 1-23.
- Immanuel, E. U. (2019). Initial development of Assertive Behavior Inventory. *Practicum Psychologia*, 9(2), 322-338.
- John O. P., Donahue E. M., Kentle R. L. (1991) *The Big Five Inventory-Versions 4a and 54*. Berkeley, CA: University of California, Berkeley, Institute of personality and social research.

- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. *Journal of Personality and Social Psychology*, 94(1), 1-17.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big-Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of Personality: Theory and Research* (114-158). New York: Guilford Press.
- Kalbfleisch, P. J. (2002). Communicating in mentoring relationships: A theory for enactment. *Communication Theory*, 12, 63-69.
- Kram, K. E. 1985. *Mentoring at work: Developmental relationship in organizational life*. Glenview, Ill: Scott, Foresman.
- Larose, S., Cyrenne, D., Garceau, O., Harvey, M., Guay, F., & Deschênes, C. (2009). Personal and social support factors involved in students' decision to participate in formal academic mentoring. *Journal of Vocational Behavior*, 74(1), 108-116.
- Lee F. K., Johnston, J. A., & Doughery, T. W. (2000). Using the five-factor model of personality to enhance career development and organizational functioning in the workplace. *Journal of Career Assessment*, 8(4), 419-427.
- Lim, G. A. (2018). An examination of personality on mentoring and coaching relationship. *Text; Electronic Thesis*. The University of Arizona.
- Makinde, B. O., & Akinteye, A. J. (2014). Effects of mentoring and assertiveness training on adolescents' self-esteem in Lagos State Secondary Schools. *International Journal of Social Science Studies*, 2, 3.Pp??
- McKellar, L. & Kempster, C. (2017). We are all in this together: Midwifery student peer mentoring. *Nurse Education in Practice*. 24, 112-117.
- Menges, C. (2016). Towards improving the effectiveness of formal mentoring programs: matching by personality matters. *Group Organization Management*, 41(1), 98-129.
- Miller, A. T., & Ham, L. S. (2020). Locus of control and college students' mentoring relationships. *Journal of College Student Development*, 61(3), 396-412.
- Mischel, W., Shoda, Y., & Smith, R. (2004). *Introduction to personality: toward an integration* (7th ed.). New York: Wiley.
- Mohabuth, A. Q. (2015). Exploring the factors that contribute towards better student-mentor relationship in work-based learning (WBL) practice. *Journal of Education and Vocational Research*, 6(1), 52-60.
- Morrison, M. (2009). *Do mentor and protégé personality interact to predict quality of mentoring?* University of Georgia.
- Neff, M., Toothman, N., Bowmani, R., Fox Tree, J. E., & Walker, M. A. (2011). Don't scratch! Self-adaptors reflect emotional stability. In *Intelligent Virtual Agents: 10th International Conference, IVA 2011, Reykjavik, Iceland, September 15-17, 2011. Proceedings 11* (pp. 398-411).
- Niehoff, B. P. (2006). Personality predictors of participation as a mentor. *Career Development International*, 11(4), 321-333.
- Nikos B., Giorgos B., Panagiotis P., & Kostantinos, K. (2014). Mentoring receipt and personality: Evidence for non-linear relationships. *Journal of Business Research*, 67(2), 171-181.
- Nwankwo, B. E., Balogun, S. K., Chukwudi, T. O., & Ibeme, N. C. (2012). Self-esteem and locus of control as correlates of adolescents well-functioning. *British Journal of Arts and Social Sciences*, 9(2), 214-228.

- Ochieng, L. A. (2021). *Relationship between locus of control orientation and school adjustment of vulnerable orphaned pupils in Kisumu central sub county, Kenya* (Doctoral dissertation, MMUST).
- Okechi B. C., Nwankwo B. C., Ogbuinya, N. E. O., & Omeje, B. C. (2013). Role of locus of control on assertive behavior of adolescents. *International Journal of Health and Psychology Research*, 1(1), 38-44.
- Okoli, C. E. (2002). *Techniques of behaviour modification*. Lagos: Behenu Press and Publishers.
- O'Mally, J., & Antonelli, K. (2016). The effect of career mentoring on employment outcomes for college students who are legally blind. *Journal of Visual Impairment & Blindness*, 110(5), 295-307.
- Omoluabi, P. F. (2002). *Big Five Inventory Manual*. Lagos: PPC Nigeria Agency.
- Onyeizugbo, E. U. (1998). *Effect of age, gender and educational level on assertiveness and marital adjustment*. Master of Science degree thesis. Department of Psychology, University of Nigeria, Nsukka.
- Onyeizugbo, E. U. (2003). Effect of age, gender and education on assertiveness in a Nigerian sample. *Psychology of Women Quarterly*, 27, 12-16.
- Onyeomoru, I. P., Okili-Ikedi, O. Nweke, J. O. & Amadu. F. (2016). Mentoring in Nigerian university: An analysis of mentor-protegee relationship and benefits. *The Nigerian Journal of Sociology and Anthropology*, 14(2), 34-47.
- Opayemi, R. (2012). Psychosocial factors predisposing university undergraduates to mentoring relationship. *Ife Psychologia*; 2(1), 70-86.
- Ormel, J., Jeronimus, B. F., Kotov, R., Riese, H., Bos, E. H., Hankin, B., ... & Oldehinkel, A. J. (2013). Neuroticism and common mental disorders: Meaning and utility of a complex relationship. *Clinical psychology review*, 33(5), 686-697.
- Peneva, I., & Mavrodiev, S. (2013). A historical approach to assertiveness. *Psychological Thought*, 6(1).
- Ridhi, A., & Santosh R. (2016). Dispositional traits influence on mentoring relationships: A revisit to the big five personality model in the Indian context. *South Asian Journal of Global Business Research* 5(3), 306-322. doi:10.1108/SAJGBR-04-2016-0030.
- Rinn, A. N., Boazman, J., Jackson, A., & Barrio, B. (2014). Locus of control, academic self-concept, and academic dishonesty among high ability college students. *Journal of the Scholarship of Teaching and Learning*, 14(4), 88-114. doi: 10.14434/josotl.v14i4.12770.
- Rotter, J. B. (1954). Cited in Kirchner, M. J. 2003. The relationship between locus of control and academic achievement among at risk student. *MA. Research Psychology*. The University of Pretoria.
- Rotter, J. B. (1966). Generalised expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), 1-28.
- Rotter, J. B. (1975). Some problems and misconceptions related to the construct of internal versus external control of reinforcement. *Journal of Consulting and Clinical Psychology*. 43(1), 56-67.
- Schuster, T., Ambrosius, J., & Bader, B. (2017). Mentoring in international assignments: a personality traits perspective. *Employee Relations*. 39(5), 649-665.
- Sulphrey, M. M., & Allam, Z. (2017). Efficacy of mentoring in enhancing academic outcome of business students in KSA. *The Social Sciences*, 12(8), 1384-1388.

- Sunderhaus, M. (2012). *Mentor attraction: the role of protégé personality, mentors' communication style and mentors' work experience* (Master's thesis, University of Twente).
- Triandis, H. C., & Suh, E. M. (2002). Cultural influences on personality. *Annual review of psychology*, 53(1), 133-160.
- Turban, D. B., Moake, T. R., Wu, S. Y., & Cheung, Y. H. (2017). Linking extroversion and proactive personality to career success: The role of mentoring received and knowledge. *Journal of Career Development*, 44(1), 20-23.
- Umeh, C. S. (2004). *The Impact of personality characteristics on students' adjustment on campus*. Unpublished Ph.D. Research Monograph Department of Psychology. University of Lagos.
- Veselka, L., Schermer, J. A., Martin, R. A., & Vernon, P. A. (2017). Do maladaptive behaviors exist within the personality structure? Meta-analysis of the relationships between the five-factor model and measures of maladaptive behaviors. *Psychological Bulletin*, 143(4), 384-426.
- Wang, P., Zhao, X., & Foo, M. D. (2013). *Sometimes it's better to leave me alone: The moderating role of culture on the relationship between leaders' mentoring and subordinate motivation*. In Proceedings of the Academy of International Business Southeast Asia Regional Conference (pp. 1-34).
- Wang, S., Tomlinson, E. C., & Noe, R. A. (2010). The role of mentor trust and protégé internal locus of control in formal mentoring relationships. *Journal of Applied Psychology*, 95(2), 358–367.
- Wolpe, J. (1949). An interpretation of the effects of combinations of stimuli (patterns) based on current neurophysiology. *Psychological Review*, 56, 277-283.

