AGREEABLENESS, CONSCIENTIOUSNESS AND SUBJECTIVE WELLBEING

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ABSTRACT

The Big Five Personality factors have long been identified as strong predictors of subjective wellbeing. However, studies on subjective wellbeing have been focused on the affective aspect of personality to the neglect of other dimensions. This study therefore examines the influence of agreeableness and conscientiousness on life satisfaction among residents in Ibadan metropolis. Using a 2-way factorial design and a multistage sampling technique, 10 enumeration areas were selected from each of the five major Local Government Areas (LGAs) in Ibadan metropolis, Oyo State, Nigeria, with simple random technique.

Two hundred and twenty households were selected from each of the selected LGAs with the help of enumeration area maps, using systematic technique, making a total of 1,100 households. A questionnaire focusing on socio-demographic profile, life satisfaction scale ($r=0.74$) and the big 5 personality inventory ($r=0.76$) was administered to homeowners and renters, who are the participants. Data were analyzed using descriptive statistics and analysis of
variance at 0.05 level of significance. Three hypotheses were tested. The result reveals that conscientiousness has a significant main effect on life satisfaction and also interacts with agreeableness to predict life satisfaction $F(1,686)=4.15)$. Emphasis should be on all the Big Five personality factors for a comprehensive examination of personality and life satisfaction.

**Keywords:** Life satisfaction, Subjective wellbeing, Big Five personality, Enumeration areas.

### 1. Introduction

The term personality refers to the uniqueness and totality of individuals, including their biological makeup. It is an individual pattern of thoughts and behavior that is stable over a long period of time and in different types of situations. Researchers have argued that, with regards to changing life conditions, it is only an unchanging factor like personality traits that can possibly remain stable over time. Personality has many classifications but the Big Five traits of neuroticism, extraversion, agreeableness, conscientiousness, and openness have long been recognized by researchers as the strongest predictors of subjective wellbeing. Subjective wellbeing, like personality traits tends to remain stable over time. Diener & Lucas (1999) assert that individual differences in both personality and subjective wellbeing appear early in life and remain stable over a long period of time and have a strong genetic component. This and other similar assertions have led some researchers into concluding that subjective wellbeing is primarily determined by our inborn predispositions (Lykken & Tellegen 1996). Subjective wellbeing is an umbrella concept that covers the study of happiness and life satisfaction where life satisfaction is associated more to the cognitive assessment of life as a whole (Erdogan, Bauer, Truxillo & Mansfield 2012). Subjective wellbeing is used interchangeably with life satisfaction and happiness (Veenhoven, 2009) in this study.

The adaptation theory of life satisfaction suggests that human reaction to difficult life events and situations fade away with time and change in our state of happiness gradually returns to the baseline after the various life events (Lyubomirsky, 2010). Clark and Georgellis (2010)
however contend that adaptation itself is influenced by personality. Heady and Wearing (1989) maintain that personality traits determine individual’s baseline levels and even though life events can move people up and down the baseline levels at different periods of time, individuals will eventually return to the baseline. Nevertheless, The Big Five remain the dominant factors in the psychology of personality (Jovanovic, 2010) and they have been widely used in investigating the association between personality and subjective well-being (Onyishi, Okongwu, & Ugwu, 2012). Ho, Cheung & Cheung (2008) aver that an individual’s satisfaction with life is largely determined by his or her personality traits. These researchers argue that genetic components explain about 80% differences in life satisfaction levels. This argument suggests that the differences in people’s life satisfaction are partly due to their biological differences. Whether an individual is satisfied with life or not, is said to be determined by individual stable personality traits, such as neuroticism and extraversion. Going by this argument, it may appear that people’s feeling of satisfaction is predominantly genetic and cannot be influenced by environmental factors. Diener, (1999) therefore concludes that there are two positions within personality theory that links personality and subjective well-being. According to the first position, some people have satisfaction in their genes while others have dissatisfaction in their genes. The second position views satisfaction as being connected but different from personality. These findings are said to be based largely on studies done on twins (Lykken and Tellegen, 1996).

Despite that, personality traits are believed to be capable of influencing life satisfaction both directly and indirectly. For example, highly extraverted individuals have a tendency to experience higher levels of positive affect than individuals who are introverted. Similarly, highly neurotic individuals tend to experience more negative affect than their emotionally stable counterparts (Luhmann & Eid, 2009). These direct effects of personality traits on positive and negative affect may explain why extraverted and emotionally stable individuals generally experience greater satisfaction with life. Personality traits may also influence subjective well-being indirectly through individual behaviour. For example, compared to those who are disagreeable, individuals who are agreeable tend to be more involved in helping behaviour, such as cooperating with others, supporting others and being polite and respectful to others.
(Graziano & Tobin, 2009). Agreeable individuals tend to be better liked by other people probably as a result of these helping behaviours (Jensen-Campbell, Adams, Perry, Workman, & Furdella (2002). These positive social outcomes may then improve agreeable individuals’ subjective well-being. Similarly, highly conscientious individuals tend to perform tasks in an efficient and thorough manner which leads to success in school and the workplace (Noftle & Robins, 2007; Berry, Ones, & Sackett, 2007). The success in turn may bring material and psychological rewards, such as income and sense of purpose, which may contribute to the positive association between conscientiousness and subjective well-being.

However, numerous findings have consistently recognized extraversion and neuroticism as the strongest predictors of life satisfaction (Emmons & Diener, 1986; Heaven, 1989; Pavot, Fujita & Diener, 1997; Cooper, 1998; Hills and Argyle, 2001; McKnight, Huebner & Suldo, 2002; Schimmack, Diener, & Oishi, 2002; Schimmack, Oishi, Furr, and Funder, 2004; Garcia, 2011). The meta-analysis by DeNeve and Cooper (1998) also reveal the existence of a large number of studies in support of the relationship between the two dimensions of neuroticism and extraversion and life satisfaction i.e. the positive and the negative affect (Veenhoven, 1984). These findings are not limited to a particular country but rather cut across many cultures (Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002) and consequently, the findings have resulted in the conclusion by many researchers that neuroticism and extraversion are usually sufficient to capture the influence of personality on life satisfaction.

Contrary to that view however, some researchers have argued that these findings are suggestive of the extensive concentration of studies on the affective/genetic aspects of personality to the neglect of the environment-related aspects of personality which has more to do with the cognitive aspect of subjective wellbeing i.e. life satisfaction. Subjective wellbeing comprises of three dimensions which are pleasant affect, unpleasant affect and life satisfaction (De Vos, Schwanen, Van-Acker, & Witlox, 2013). Diener and Lucas (1999) argue that neuroticism and extraversion have consistently been known to predict the affective components of life satisfaction (Schimmack, et al., 2002) while conscientiousness, agreeableness, and openness are not strongly linked with life satisfaction because they are more related to the environment. These
authors have therefore suggested that, out of the Big Five, neuroticism and extraversion are more related to affect while agreeableness, conscientiousness and openness are more related to the environment. Going by this argument, affect alone may not be sufficient to explain personality effect on subjective wellbeing. Angeles (2010) & Clark & Georgellis (2010) contend that the only life event capable of having a major effect on life satisfaction is unemployment (Lucas, Clark, Georgellis & Diener (2003) & Diener, Lucas & Scollon (2006). Unemployment appears to be more of an environmental factor than affective or genetic and therefore its effect on life satisfaction may not be adequately captured by only the traits of neuroticism or extraversion. Therefore, the above evidence suggests that researchers may have been concentrating more on the affective/genetic aspect of personality than the environmental aspect of it, in examining life satisfaction.

Steel, Schmidt & Shultz (2008) argue that most studies on personality and subjective wellbeing have focused on emotions such as the positive and negative affect of subjective wellbeing rather than life satisfaction. Moreover, there are inconsistencies in the findings relating to the relationship between the Big Five and life satisfaction, particularly conscientiousness and agreeableness. For example, Bahiraei, Eftekharei, Zareimatin, & Soloukdar (2012) report that neuroticism, extraversion, and conscientiousness are related to happiness while agreeableness and openness have no significant relationship with happiness. Joshanloo and Afshari (2009), observe that neuroticism and extraversion strongly predicts life satisfaction and self esteem completely mediates the influence of agreeableness and conscientiousness on life satisfaction. Lounsbury, Saudargas, Gibson & Leong (2005) maintain that neuroticism, extraversion conscientiousness and agreeableness accounts for 45% of the variance in life satisfaction. Boyce, Wood & Powdthavee (2013) & Watson & Humrichouse (2006) report an association between neuroticism, extraverted, agreeableness, conscientiousness and subjective well-being. Costa and McCrae (1992) suggest that extraversion, neuroticism and agreeableness are consistently linked with life satisfaction. These findings are contradictory and therefore raise further questions about the independent influence of agreeableness and conscientiousness on life satisfaction.
Nevertheless, McCrae and Costa (1991) assert that agreeableness and conscientiousness would increase the possibilities of individuals having positive experiences in social and achievement situations, respectively and these positive experiences are directly related to life satisfaction. They maintain that agreeableness should be related to life satisfaction because agreeable individuals are better motivated to achieve interpersonal intimacy, which might lead to higher level of subjective wellbeing. Organ and Lingl (1995) argue that Agreeableness involves getting along with others in pleasant satisfying relationships. Agreeableness enhances positive experiences in social situations and increases subjective well-being (Hayes & Joseph, 2002). On the other hand, Individuals who are conscientious are usually very determined, disciplined with strong will and trustworthy. They are very much achievement oriented, self-disciplined and deliberate in their thinking (Costa & McCrae, 1992). Highly conscientious people have a strong sense of responsibility and are highly success oriented. Conscientiousness is related to job and life satisfaction because it represents a general work involvement tendency (Organ & Lingl, 1995). The subjective well-being literature suggests a positive relationship between conscientiousness and job satisfaction (DeNeve & Cooper, 1998). There is also the possibility of an interaction effect of agreeableness and conscientiousness on life satisfaction. Jiang, Wang, & Zhou (2009) observe that conscientiousness interact with agreeableness to affect behaviour.

Steel et al. (2008) suggest that at least four of the Big Five traits should be included in any research concerning the relationship between personality and life satisfaction and not only neuroticism and extraversion but also agreeableness and conscientiousness. Despite this, agreeableness and conscientiousness have received less attention than neuroticism and extraversion in connection with subjective well-being. In addition, inconsistencies in the various findings necessitated further investigations into the association between these traits and individual life satisfaction. Few studies have examined whether agreeableness and conscientiousness are related to life satisfaction and even fewer studies have considered the independent and interaction effects of agreeableness and conscientiousness on life satisfaction. Therefore it is not clear whether agreeableness and conscientiousness are sufficient or even
necessary to capture personality influences on life satisfaction. The present study addresses this question by examining the influence of conscientiousness and agreeableness on life satisfaction.

The following research questions are raised: Will agreeableness independently influence life satisfaction? Will conscientiousness independently influence life satisfaction? Will conscientiousness interact with agreeableness to influence life satisfaction? This study therefore investigates the main and interaction effect of conscientiousness and agreeableness on life satisfaction. One major contribution of this study would be the implication of its findings for personality assessment of individuals on life satisfaction.

Based on review of literature three hypotheses were generated:

1. Conscientiousness will significantly independently influence life satisfaction.
2. Agreeableness will significantly independently influence life satisfaction
3. There will be an interaction effect of conscientiousness and agreeableness on life satisfaction.

2. METHODS

2.1. Design

The study design is a 2-way factorial design. The independent variables in the study are: conscientiousness which comprises of (high and low) and agreeableness which comprises of (high and low). The dependent variable is life satisfaction.

2.2. Research Setting

The study took place in 50 enumeration areas (EAs) or neighbourhoods across the five major Local Government Areas (LGAs) in Ibadan metropolis. The choice of selection across the five major Local Government Areas (LGAs) was to enable the researcher have a representative
sample of Ibadan while the choice of Ibadan metropolis as the research setting is due to the cosmopolitan nature of the city.

2.3. Sampling Procedure

A multistage sampling method was adopted for the study. The first stage involves obtaining the list of all Local Government Areas (LGAs) in Ibadan metropolis from the Ministry of Lands and Housing and selecting the five major ones from the available eleven LGAs, using purposive sampling method. The second stage involves obtaining the list of enumeration areas (EAs) for the selected five major LGAs in Ibadan metropolis from the National Population Commission (NPC). The researcher randomly selected 50 EAs i.e. ten EAs from each Local Government Area (LGA) by assigning numbers to the enumeration area (EA) names, calculating the sample fraction, randomly selecting the first EA and finally selecting every nth on the list for the remaining EAs, based on the sample fraction. Stage three was the obtaining of the selected EA maps from the National Population Commission to determine the number of houses and their locations in the selected EAs in each of the LGAs. The fourth Stage was to randomly select households among the identified houses from each EA by picking and marking every other household or balloting to select a household where there are blocks of flats. The last Stage was the sampling of all heads of households residing in the marked houses.

2.4. Participants

A total of 1100 participants were randomly selected. Two hundred and twenty participants were sampled in each LGA, making a total of 1100 participants of which only 1012 responded and returned their questionnaires due to the nature of their jobs and the length of the questions. Participants consist of house-owners and renters drawn from the high, low and medium density areas of the five major LGAs.

2.5. Research Instrument

The main instrument for sourcing information for this research was a structured questionnaire which consist of three sections: A to C.
2.5.1. **Section A** consists of the social demographic characteristics of participants such as, age, gender, religion, occupation, marital status, ethnic group, educational status and so on.

2.5.2. **Section B: Big 5 Personality Inventory** is a 44 item scale developed by Neugarten and Soto (2008). It measures 5 trait dimensions of personality i.e. extraversion, neuroticism, agreeableness, conscientiousness and openness. It uses a 5-point Likert scale such as disagree strongly, disagree a little, neither agree nor disagree, agree a little and agree strongly. Agreeableness has 9 items; items nos. 2, 7, 12, 17, 22, 27, 32, 37 and 42, out of which items 2, 12, 27 and 37 were reversed scores. Conscientiousness has 9 items such as items 3, 8, 13, 18, 23, 28, 33, 38 and 43, however, items 8, 18, 23 and 43 were reversed scores. The cronbach alphas are as follows: agreeableness .68, conscientiousness .70. The mean obtained in this study for agreeableness is 26.71 and conscientiousness 25.40. Participants who scored above the mean were considered to be high on the particular variable while participants who scored below the mean were regarded as low on the variable.

2.5.3. **Section D: Life Satisfaction Scale** measures life satisfaction which refers to the contentment or an acceptance of one’s life circumstances. It is used interchangeably with subjective wellbeing and happiness. It was measured by a 20-item scale developed by Neugarten et al (1961). It has 3 response formats which are disagree, agree and don’t know. It measures 5 domains of life such as zest for life, resolution and fortitude, congruence between desired and achieved goals, high physical, psychological and social self-concept, happy and optimistic mood tone. The 20 item has become the most used survey instrument for older adults (Helmes, Goffin&Chrisjohn, 1998). The Cronbach alpha reported ranges from 0.79 to 0.90. It’s a three-point scoring system which rates an agree response as 2, I don’t know response as 1 and A disagree response as 0. The Cronbach alpha recorded for this study is 0.55. The mean for this study is 19.61. Participants who scored above the mean were categorised as being satisfied with life while those who scored below the mean were classified as not being satisfied with life.

2.6. **Procedure for Data Collection**

At the onset, the researcher located the randomly selected enumeration areas or neighbourhoods within the five major Local Government Areas (LGAs) with the help of the
seven experienced staff members of the National Population Commission who were the research assistants for this study. Enumeration area maps were used to identify the selected enumeration area boundaries. Having randomly selected all the houses in the selected enumeration areas, households were identified. Having identified the households, the researcher identified heads of households of each of those selected houses and presented the researcher’s letter of introduction to them. The research assistants also applied their vast experience in getting the cooperation of some, initially, uncooperative participants. Participants were made to understand that the purpose of the exercise was purely academic and therefore the confidentiality of their responses was guaranteed. The researcher sought their permission to mark their houses with chalk before the commencement of the administration of questionnaires. Having agreed to participate in the study, participants were made to sign the consent forms before the questionnaires were given to them to test the stated hypotheses. Questionnaires were administered under the condition of anonymity. Some questionnaires were completed and returned immediately, some were collected later, while some were never returned. The delay in collection of questionnaires was partly due to the tight schedule of some respondents and the number of items involved in the scales. Some of the questionnaires that were either not well filled or completed were discarded, making a total of one thousand one hundred and twelve completed and returned questionnaires. The completed copies were scored and analyzed with Statistical Package for the Social Sciences (SPSS) software.

2.7. Statistical Analysis

The statistical tool employed in this study includes descriptive statistics and 2 x 2 analysis of variance (ANOVA). Analysis of variance was used to test for the main and interaction effect of conscientiousness and

3. RESULTS

The participants’ age range was 42.11±15.20 years. 443 (43.8%) of the participants were males while 569 (56.2%) were females. Educational qualifications of participants were – 9.9% no formal education, 23.7% primary education, 29.9% secondary education and 36.5% tertiary
education. Married participants were 806 (79.6%), never married 114 (13.5%), separated 17 (1.7%), divorced 2 (0.27%) and widowed 50 (4.9%). 242 (31.9%) participants were house-owners while 690 (68.1%) were renters.

Table 1: Summary of 2 x 2 ANOVA showing the main and interaction effect of conscientiousness and agreeableness on life satisfaction

| Source                        | SS   | DF | MS   | F    | P    |
|-------------------------------|------|----|------|------|------|
| Conscientiousness             | 86.02| 1  | 86.02| 7.94 | <.05 |
| Agreeableness                 | 6.07 | 1  | 6.07 | .56  | >.45 |
| Conscientiousness/Agreeableness| 315.62| 1 | 315.62| 4.15 | <.05 |
| Error                         | 7433.39| 686| 10.84|      |      |
| Total                         | 8058.58| 689|      |      |      |

The result of the Factorial ANOVA shows that conscientiousness influenced life satisfaction (F(1,686)=7.94; p<.05) while agreeableness did not influence life satisfaction (F(1,686) = .56; p>.05). There was an interaction effect of conscientiousness and agreeableness on life satisfaction (F (1,686) = 4.15; p<.05). The outcome reveals that conscientiousness influenced life satisfaction.

Table 2: Mean table showing the mean scores of participants on the interaction effect of Conscientiousness and agreeableness on life satisfaction.

| Conscientiousness | Agreeableness | N  | Mean | SD  |
|-------------------|---------------|----|------|-----|
| Low               | Low           | 547| 19.42| 4.33|
|                   | High          | 452| 18.04| 3.97|
| High              | Low           | 418| 18.66| 4.26|
The result of the mean difference shows that there was no significant difference between participants’ life satisfaction level when conscientiousness was low but there was a difference when conscientiousness was high.

Fig. 1 showing the interaction effect of agreeableness and conscientiousness on life satisfaction
The graph indicates an interaction effect of conscientiousness and agreeableness on life satisfaction. Participants who were conscientious and agreeable, reported higher level of life satisfaction than participants who were low on both conscientiousness and agreeableness.

4. Discussion
Results indicate that conscientiousness independently influenced life satisfaction while agreeableness did not have a significant main effect on life satisfaction. There was also an interaction effect of conscientiousness and agreeableness on life satisfaction. Therefore hypotheses one and three were confirmed while hypothesis two was not confirmed. The confirmed influence of conscientiousness on life satisfaction is consistent with previous studies which have reported that conscientiousness is the strongest predictor of life satisfaction (DeNeve & Cooper, 1998; Joseph & Hyes, 2003; Schimmack, Schupp, & Wayner, 2008). Hayes and Joseph (2003) suggest that the role of conscientiousness in relation to life satisfaction has been understated. According to them, individuals high on conscientiousness are more likely to be able to function effectively in society and achieve their goals which in turn, leads to greater life happiness.

Joshanloo and Afshari (2011) investigate the trait of conscientiousness in relation to life satisfaction and reported a correlation. According to Boyce, Wood, & Brown (2010), conscientiousness could be a predictor for the cognitive assessment of subjective well-being and conscientious people have a tendency to be satisfied with life because of their aspiration to make progress in life. Steel et al. (2008) also report a positive relationship between conscientiousness and subjective well-being. Fagley (2012) found that neuroticism, extraversion and conscientiousness were significant predictors of life satisfaction. Parker, Martin and Marsh (2008) examined factors predicting life satisfaction and suggest a strong relationship among extraversion, neuroticism, and conscientiousness and happiness. Bratko and Sabol (2006) contend that extraversion, neuroticism and conscientiousness were significant predictors of life satisfaction.
Hypothesis three confirms the interaction effect of conscientiousness and agreeableness on life satisfaction. Participants who were high on the traits of conscientiousness and agreeableness reported higher levels of life satisfaction than their counterparts who reported being low on conscientiousness and agreeableness. This finding is in line with Shih & Chuang (2013) & Guay, Oh, Choi, Mitchell, Mount, & Shin (2013) who observe that high levels of conscientiousness interact with high levels of agreeableness to affect task performance and helping behavior. Boyce et al., (2013) also document a bivariate relationship between agreeableness and life satisfaction which they attribute to the link between life satisfaction and other personality factors that co-occur with agreeableness, rather than agreeableness itself.

Conscientiousness is generally known as having character. Conscientiousness means to be willing to do a job well. Conscientious personalities are efficient and organized as against being easy-going and disorderly. They exhibit planned behavior rather than spontaneous behavior and they are generally organized and dependable. This is manifested in their characteristic behaviors such as being neat, systematic, careful, thorough, and deliberate. Conscientious individuals are generally hard-workers and reliable. In some extreme cases, they may also be workaholics, perfectionists and could be compulsive in their behavior. Low conscientiousness has been associated with antisocial behavior, crime, as well as unemployment, homelessness and imprisonment.

Agreeableness on the other hand will make one have less antagonists, more assistance from people and consequently better chances of success which might improve one’s level of satisfaction with life. McCrea and Costa (1991) observe that agreeable individuals have greater motivation to achieve interpersonal intimacy. These intimacies in the form of friendship serve as a stress booster, hence bolstering life satisfaction in a positive and significant way. The lower level characteristics of agreeableness are compliance, straightforwardness, modesty and tender-mindedness. Agreeable people are said to be kind, sympathetic, friendly, warm, considerate and cooperative. Related behaviors include being flexible, trusting, forgiving and tolerant (McCrae & Costa, 1986). People who score high on agreeableness have a tendency to be honest, decent and
trustworthy. The above features of agreeableness and conscientiousness are qualities that could easily enhance people’s satisfaction with life.

4.1. Conclusion

This study found no main effect of agreeableness on life satisfaction but there was a main effect of conscientiousness on life satisfaction. This implies that conscientiousness independently influenced life satisfaction while agreeableness did not have a significant influence on life satisfaction. The findings also reveal a significant interaction effect of conscientiousness and agreeableness on life satisfaction. Participants who scored high on the traits of conscientiousness and agreeableness were more satisfied than those who scored low on those two personality factors.

4.2. Implication and Recommendation

The result of this study has shown the main and interaction effect of conscientiousness and agreeableness on life satisfaction. This emphasizes the significance of personality factors in improvement of life satisfaction. This result also has implications for clinical practices especially as it relates to counselling. The characteristic behaviour of conscientiousness such as being neat, careful, disciplined, organized, hard working, and the characteristic behaviour of agreeableness, such as compliance, straightforwardness, kindness, sympathetic, friendly, considerate, cooperative, trusting, forgiving and tolerant, as stated above, can be taught because they are more of a function of the environment rather than genetic. Therefore these attributes should be included in counselling.

It is therefore recommended that subjective wellbeing experts and researchers generally, should include at least four, if not all the Big Five Factor model of personality in order to have a comprehensive assessment of the relationship between personality and life satisfaction. It is also recommended that policy makers should incorporate the above characteristics in the
school’s curriculum and the society should encourage and reward individuals who display these positive behaviours in order to encourage others to do so.

Limitation and suggestion for future studies

The participants for this study were selected from the metropolis alone, therefore, future studies should attempt a larger area.

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