The Predictive Influence of Extraversion and Neuroticism on Life Satisfaction Judgments of Adults in Ado-Ekiti, Nigeria

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ABSTRACT
This study investigated the predictive influence of personality factors, extraversion and neuroticism, on life satisfaction judgments of educated adults in different age categories. Employing a sample of 544 participants of educated adults in the age cohorts of 20 – 39 years (male = 75, female = 201), 40 – 59 years (male = 63, female = 116), and 60+ years (male = 49, female = 40), selected through a multi-stage sampling, and administering on them Life Satisfaction Index, Big Five Inventory, and a Personal Data Inventory, analyses of data using Simple Linear Regression revealed that
(i) extraversion predicted life satisfaction among educated adults in age category 20-39 years only, and not in adults in age categories 40-59 years and 60+ years.
(ii) neuroticism predicted life satisfaction among educated adults in all the different age categories.

Based on the finding, recommendations were made to Nigerian Governments and many relevant others and agencies, in the lives of Nigerian adults to use the opportunity of the knowledge of the importance of these factors in life satisfaction judgments among adults to help Nigerian adults feel satisfied with their lives.

Key Words: predictive influence, extraversion, neuroticism, life satisfaction, judgement, adults, Nigeria.
INTRODUCTION

Throughout life –time, individuals strive for the accomplishment of developmental tasks (Havighurst, 1953), as well as permanently seeking to satisfy needs (Maslow, 1967). Accomplishing developmental tasks and satisfying even basic needs in Nigeria has become increasingly and terribly tasking in recent time, for many reasons which include poor and unhealthy, Nigerian economy (World Bank Report, 1999; 2000/2001), high poverty level (Sala-I-Martins, 2002b), high inflational rate and the consequent erosion of the purchasing power of the Naira (Ajakaiye, 2003; Tomori et al, 2005), widespread unemployment among Nigerians, and an abysmally low, average real take-home wages for the few that are employed (National Planning Commission, 2004), high susceptibility of the Naira to exchange rate changes because of the import-dependent tendencies of Nigeria and its largely uncompetitive manufacturing industries (Ajayi, 1995).

Onyehalu (1983) had described the Nigerian socio-economic environment vis-à-vis the experiences of Nigerians. According to him, Nigerians are much preoccupied with combating adverse environmental conditions and trying to secure the primary needs of life, to the extent that even some of the potential geniuses do not ultimately have opportunities to develop and advance to the higher needs of achievement of self-actualization. Even years after, it is still very glaring and evident that the situation has not abated, considering that World Values Study Group (2004) revealed that a greater percentage of Nigerians live below the international poverty bench mark of one American dollar per day, a situation that made the survey group to describe Nigeria as one of the poorest of the poor nations in the world. The findings of the study Group also revealed that the Development Index of Nigeria was at a confounding low level, making her rank 151 among the 171 countries whose living conditions it evaluated. Animasaun (2005) and Tomori et al (2005) also, in their separate studies lend credence.

The adverse effects of Nigeria’s bad economy take its toll on virtually every Nigerian, irrespective of age or sex. For example, the educational sector, a supposed fulcrum of human (especially young adults) and national development, has suffered a great decline due to neglect and poor funding (Dauda, 2005), thereby making Nigerian schools’ physical environments psychosocially stressful for the young adults in schools. The problem of aging in Nigeria, especially in the area of provision of adequate care-need for adults in late adulthood category seems only glibly addressed, notwithstanding the 1989 Social Development Policy of the Federal Government of Nigeria that aims at ensuring integration of the aged in the mainstream of Nigeria’s national life. Dauda (2005) reported that adequate arrangements are not made for the care of the aged in Nigerian hospitals.

The Problem

The living conditions of Nigerians as described by researchers (World Bank Report, 2000/01, Ajayi; 1995; Sala-I-Martins, 2002b; Ajakaiye, 2003; Tomori, et al,
2005; Adedipe, 2004; Dauda, 2005) are considerably and comparatively of low quality, a factor that had been used to argue and explain incidences of low level life satisfaction and happiness among the citizens of many developing countries (Hammer, 1996; Inglehart and Klingemann, 2000).

Interestingly however, a survey (World Values Study Group, 2004) reported a high level life satisfaction among Nigerians. Based on this report of high level life satisfaction among Nigerians, and especially against the background of the overwhelming evidences of poor living conditions of the citizens, one wonders whether the reported life satisfaction among Nigerian adults is not a product of some other factors (personality) rather than of the stress-provoking, poor socio-economic environment. It becomes necessary therefore to investigate the predictive influence of some personality factors; extraversion and neuroticism in life satisfaction judgments of adults in Ado – Ekiti.

**Extraversion and neuroticism in life satisfaction judgments of adults**

Explanations about the factors responsible for human life satisfaction judgments are provided in the views expressed in situational (Bottom-up) and dispositional (Top-Down) theories. The strong point of the situational exponents (Brickman and Campbell, 1971; Diener & Diener, 1996; Suh, Diener & Fujita, 1996; Mischel & Shoda, 1995; Gazzaniga & Haetherton, 2003) is that life events and experiences (social and environmental factors) form the basis for human life satisfaction judgments, depending on whether the events or experiences are good or bad (hedonic treadmill). Dispositional exponents (Heady & Wearing, 1992; Costa & McCrae, 1984; Judge, Locke & Durham 1997; Heller, Watson & Ilies 2004) emphasize the role of personality traits in producing individual differences in life satisfaction and other well-being variables. They argue that though, proximal life experiences will make people satisfied or otherwise with life, depending on whether the events are good or bad, but individuals will, overtime, return to a baseline (positive affect or negative affect) that is determined by their personality. They noted that, to the extent that aspects of personality influence how particular experiences are valued, they are likely to influence the degree to which those experiences are tied to one’s broader sense of well-being.

Costa & McCrae (1984) espoused that personality traits, especially those of extraversion and neuroticism have influence on life satisfaction because of their ability to shape the ways meanings are given to events and emotional experiences. They were precise on the impact of some human personality traits on, and relationship with life satisfaction, explaining that adults high on aspects of neuroticism would be consistently less satisfied with their lives, while those high on extraversion would be consistently more satisfied. They contended further that measures of neuroticism or extraversion at any one point in an adult’s life would always predict happiness and satisfaction with life, even some ten to twenty years before.
Gray, Berlin, McKinley & Longscope (1991) provided a theoretical explanation of the relationship between extraversion and neuroticism, espousing that extraversion originates with a neurologically based sensitivity to rewards and pleasure, which is also associated with greater levels of dopamine in the brain (Panksepp & Miller, 1996). Extraversion therefore, will predispose individuals to feel more pleasure when they engage in activities, regardless of the content of the activity. On the other hand, individuals with high level neuroticism possess maladaptive attributes which make them prone to interpreting life events in a negative manner, thus, potentially playing a role of keeping life satisfaction low, or decreasing it.

**Objectives of the Study**

The objective of this study is to determine whether the personality traits, extraversion and neuroticism will in specified ways, predict life satisfaction among educated adults within age categories 20-39, 40–59, 60+ years respectively. This objective has theoretical, developmental and cross-cultural implications for the understanding of the relationship that may exist between personality and life satisfaction.

**Hypotheses**

(i) Extraversion will have significant positive prediction on life satisfaction among educated adults in age categories 20-39, 40 -59, 60+ years respectively.

(ii) Neuroticism will have significant negative prediction on life satisfaction among educated adults in age categories 20-39, 40-59, 60+ years respectively.

**Significance of Study**

This research is an attempt at responding to the clarion call by the United Nations (1985) to its member nations, to give priority to issues that could enable every citizen of the world, irrespective of race and especially age, to derive psychological satisfaction from living. Since there are evidences that people who are satisfied with their lives tend to be more creative, more pleasant to be with (Denovan & Halpen, 2000), less likely to get divorced, perform better at work and even, live slightly longer (Staw, Sutton & Pelled 1994), the findings will provide empirical basis for policy makers and corporate leaders to formulate or design policies that are capable of eliciting satisfaction with living.

**METHOD**

**Research Design**

The study adopts the survey research design. Questionnaires were used to generate data. Personality traits (Extraversion and Neuroticism) served as the independent variables (predictors) while life satisfaction served as the dependent variable. The design is developmental and cross sectional. A 3 x 1 factorial design was
used to determine the predictive influence of each of extraversion and neuroticism on life satisfaction of adults of different age categories.

Population and Sample

The population of Ado – Ekiti (capital of Ekiti State) by the 1991 census is 156,122 consisting of 78,590 males and 77,530 females, 82% of which are made up of adults over 20 years and above. It is however speculated that the population would have increased considerably since then. A multi-stage sampling technique was employed to select 750 participants comprising of adults aged 20 years and above for the study. 544 copies of the questionnaire that were found useable generated the data for the study. The distribution of the 544 subjects are as follows:

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 – 39 yrs</td>
<td>75</td>
<td>201</td>
</tr>
<tr>
<td>40 – 59 yrs</td>
<td>63</td>
<td>116</td>
</tr>
<tr>
<td>60+ yrs</td>
<td>49</td>
<td>40</td>
</tr>
<tr>
<td>TOTAL</td>
<td>187</td>
<td>357</td>
</tr>
</tbody>
</table>

Instrument

The research instrument consisted of three parts viz:

(a) Part ‘A’ that required demographic information relating to age, educational qualifications, sex, etc
(b) Part ‘B’ that consisted of Life Satisfaction Index (Neugarten, Havighurst & Tobin et, 1961)
(c) Part ‘C’ that consisted of the Extraversion and Neuroticism subscales of the Big Five Inventory (John, et al, 1991).

The Life Satisfaction Index, developed by Neugarten et al (1961) has 18 items which are statements about life in general that people feel differently about. A respondent is expected to rate each statement, 1, 2, or 3 depending on how the statement describes how she/he feels. The numbers stand for 1 = Disagree, 2 = Unsure, 3 = Agree. All the 18 items are scored directly and the value of the numbers shaded in all items is the total score of the participant on Life Satisfaction Index. Erinoso (1996) recorded high concurrent validity coefficients when correlated with Death Anxiety (Templar, 1970) and Religious Affiliation Scale (Omoluabi, 1995). A Pilot study by the researcher, using test-retest method at interval of 40 days for a sample of 45 educated adults obtained a reliability coefficient of .94 for Life Satisfaction Index. Life Satisfaction Index when correlated with scores on Satisfaction with Life Scale (Pavot & Dienner, 1993) for 40 participants gave a validity coefficient of .72.

The Big Five Inventory (John et al, 1991) contains five subscales, including Extraversion and Neuroticism sub-scales. The BFI consists of 44 items including 8 items each for extraversion and neuroticism. The items on extraversion measure individual’s
high energy and activity level, dominance, sociability, expressiveness and positive emotions, while the items for neuroticism measure anxiety, sadness, irritability and nervous tension. All the items are constructed as statements that people often use to describe themselves and could be rated on a 5 – point scale depending on how each statement describes the feeling of the participant. Direct scoring is used for all items but each sub-scale is scored separately. The subject’s score in each sub-scale is obtained by adding together the numbers shaded. The psychometric properties reported by John et al (1991) are

(i) Internal consistency Cronbach alpha is .80
(ii) 3 month interval test retest coefficient is .85
(iii) Convergent validity of .75 and .85 when correlated with Big Five Inventory (Costa and McCrae, 1992) and Big Five Inventory (Golberg, 1992) respectively.

Pilot Study:
A pilot study using test – retest method at interval of 40 days for a sample of 45 educated adults yielded a reliability coefficient of .96 and .77 for extraversion and neuroticism respectively. When correlated with Five Factor Inventory subscales (Costa and McCrae, 1992), validity coefficient of .82 and .92 were obtained for extraversion and neuroticism respectively.

Procedure
Prior to administration of questionnaires, visits were made to the randomly selected ministries, schools, hospitals, industries, offices of National Directorate of Employment, state legions, trade unions, hotels and workshops in Ado Ekiti for consultations and choice of dates and venues for administration of questionnaires. Copies of questionnaire were later administered on each group of participants on choice dates, in their various departments and locations, availing all participants enough time to respond to the items. Copies of questionnaire were collected back immediately in all instances. Scoring was done manually and responses were coded according to scoring schedule for the instrument. Data collected was subjected to simple Linear Regression Analysis, to determine whether or not, each of extraversion and neuroticism will predict life satisfaction among educated adults in age categories 20 – 39, 40 – 59, 60+ years respectively, in specified ways.

RESULTS:
Table 1: Simple linear regression analysis showing influence of extraversion on life satisfaction among educated adults in age categories 20 – 39, 40 – 59, 60+ years.

<table>
<thead>
<tr>
<th>Age Category</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>P</th>
<th>B</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-39</td>
<td>.345</td>
<td>.119</td>
<td>37.004</td>
<td>&lt;.05</td>
<td>.345</td>
<td>6.083</td>
<td></td>
</tr>
</tbody>
</table>
Considering the standard beta weight in each of the age categories (table 1), extraversion predicts life satisfaction in educated adults within the age category 20 – 39 years (B = .345, t = 6.083, P<.05). Extraversion does not significantly predict life satisfaction among educated adults in age categories 40 – 59, and 60+ years. Hypothesis 1 which states that extraversion will have significant positive predictive influence on life satisfaction among educated adults in different age categories is partially rejected.

Table 2: Simple Linear Regression Analysis showing influence of Neuroticism on Life Satisfaction among Educated Adults in Age Categories 20 – 39, 40 – 59, 60+ years.

<table>
<thead>
<tr>
<th>Variable (Age)</th>
<th>R</th>
<th>R^2</th>
<th>F</th>
<th>P</th>
<th>B</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-39 yrs</td>
<td>.395</td>
<td>.156</td>
<td>50.742</td>
<td>&lt;.05</td>
<td>-.395</td>
<td>-7.123</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>40-59 yrs</td>
<td>.291</td>
<td>.085</td>
<td>16.364</td>
<td>&lt;.05</td>
<td>-.291</td>
<td>-4.045</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>60+ yrs</td>
<td>.434</td>
<td>.189</td>
<td>20.226</td>
<td>&lt;.05</td>
<td>-.434</td>
<td>-4.497</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

Considering the beta weight in each of the age categories, table 2 shows that neuroticism significantly predicts life satisfaction among educated adults within age category 20 – 39 years (B = .395, t = -7.123, P<.05); 40 – 59 (B = -.291, t = -4.045, P<.05); 60+ years (B =-.434, t = -.497, P<.05). Hypothesis 2 which states that neuroticism would have significant negative predictive influence on life satisfaction among educated adults in different age categories is therefore accepted.

Discussion

The objective of this study was to determine whether extraversion and neuroticism will in specified ways predict life satisfaction among educated adults. Hypothesis 1 which states that extraversion will have significant positive prediction on life satisfaction among educated adults in age 20 – 39, 40 - 59, 60+ years respectively was rejected because extraversion only significantly predicted life satisfaction among adults in 20-39 years category. Costa and McCrae (1992) explained that extraversion predicts life satisfaction because it predisposes individuals to more positive affects and emotions, a characteristic which Watson and Clark (1997) confirmed makes extraverts to find life situations more rewarding and satisfying.

That extraversion does not predict life satisfaction among adults within age categories 40 – 59, 60+ years could be explained in terms of what some researchers (Markus and Kitayama, 1991; Mischel and Shoda, 1995; Twenge, 2002; Gazzaniga and
Heatherton, 2003; Mischel, 2004) describe as situationism, a condition in which a person’s behaviour is mostly a function of a transient situation rather than of internal traits. While Mischel and Shoda (1995), observed that personality traits often fail to predict behaviour across different circumstances because people’s responses in any given situation are usually influenced by how they encode or perceive the situation, their affective (emotional) response to the situation, the skills and the competencies they have to deal with challenges, and their anticipation of the outcome that their behaviour will produce, Gazzaniga and Heatherton (2003) also noted that people are highly sensitive to social and societal changes, which some times, could become more relevant than personality factors in life satisfaction judgment. Suh, Diener and Fujita (1996), in the same vein also submitted that transient factors such as recent positive and negative events, momentary emotions are capable of intervening and dominating in interplay with personality factors to determine life satisfactions in adults.

Though the socio-economic problems in Nigeria may be said to take its toll on every category of adults, no doubts, the middle – aged and elderly adults are more likely to be more burdened, taking cognizance of their numerous developmental expectations and responsibilities, which for the prevailing socio-economic reasons, they have not been able to discharge creditably. Also, the tense political atmosphere in Ekiti State, characterized by organized attacks, harassments and killings of political opponents, culminating in the President of the Federal Republic of Nigeria, declaring a state of emergency in the state at a time this research was been conducted (See THE SUN, 23 September, 2006) could be considered a strong and potent transient situation factor, capable of altering the predictive characteristics of extraversion traits, or that can interact in a more dominant form with personality factor, to determine life satisfaction judgments of Nigerian adults.

Cultural reasons as argued by some researchers may also account for this findings. For example, Markus and Kitayama (1991) noted that people from collectivist countries e.g America, Britain, see “self” in relation to specific situations and context, a situation which Church and Katigbak (2000) explained, may cause traits to be less predictive in collectivist cultures. Buda and Elsayed – Elkhouhy (1998) also explained that in collectivist cultures such as in the African countries (Nigeria is in Africa), where the needs, feelings and experiences of groups are considered more paramount than that of individuals, transient situational factors that affect the group is most likely to dominate life satisfaction and happiness judgments of people. Nigerian adults, especially of the middle and late adulthood categories, by their social expectations and responsibilities, cultural orientation and disposition, expectedly, will feel very much concerned about the negative happenings around them, not only as they affect them directly alone, but as they also affect their relations and even strangers around them. Following this trend therefore, that extraversion does not predict life satisfaction among adults of age categories 40–59, and 60+ years, has explanations in the possible interplay of extraversion with culture and
transient situational factors, perhaps with culture and situational factors taking dominance.

Hypothesis 2 was premised on views in literature that neuroticism is a product of biologically – based anxiety and fear responses which keep feelings of life satisfaction low in adults. That neuroticism have significant negative prediction on life satisfaction among educated adults in all age categories is consistent with findings on earlier similar studies (Costa et al, 1980; Denave and Cooper, 1998; Hills and Argyle, 2001; Schimanack et al, 2002). People with neurotic tendencies are characterized by negative affects and high level distress and anxiety because they focus on the unpleasant aspects of themselves and others. The prediction perhaps, is expected in view of the experiences of Nigerian adults in most spheres of life satisfaction considerations.

CONCLUSION AND RECOMMENDATION

The main findings in this work are that neuroticism is a predictor of life satisfaction among adults in Ado Ekiti, but extraversion is not predictive of life satisfaction among adults above 40 years of age. Extraversion however predicts life satisfaction among young adults between age 20 – 39 years. The implication of these is that both situational and dispositional factors are relevant in life satisfaction judgments of Nigerian adults. It therefore behoves on government, industrial chieftains, parents and relevant others in the lives of Nigerian adults to use the opportunity of knowledge of the influence of these factors in life satisfaction judgments among adults to make appropriate and adequate provisions and remedies that would enhance adults life satisfaction with their lives. The following recommendations are therefore made.

(i) Government at all levels and their agencies, indeed, relevant others should give consideration to, and design appropriate measures that can reduce neurotic tendencies and negative emotions among Nigerian adults.

(ii) Transient situational factors capable of causing negative emotions and feelings such as religious and political upheavals, insecurity, maiming and killings should be prevented as much as possible.

REFERENCE


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