Profile of the Personality of Educated Urban Nigerians

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There is a paucity of factor-analytic studies of personality in Africa. The study's objectives were: (1) to use the 32 polar names of Cattell's primary-order factors as a basis for highlighting the general character of a broad segment of urban Nigerians; and (2) to determine whether factor analysis of the data would yield the type of factors that have been described in other cultures. The sample of 3029 participants included people from all 31 states in 1996, most tribal groups, and most major occupational groups. The standardized item alpha for the questionnaire was 0.85. Descriptors endorsed by over 55% of participants included being: reserved; serious-minded; expedient; trusting; practical; forthright; selfassured; relaxed; outgoing; emotionally stable; conscientious; sensitive; imaginative; experimenting; self-sufficient; and controlled. Only 26% considered themselves as groupdependent. They were thus typical of the open-minded, productive, aggressive, and confident persons that one typically encounters in workplaces in Nigerian cities. The seven factors that emerged were similar to the "Big Five," plus the two valence factors that constitute the "Big Seven." Neuroticism and extraversion were the most robust factors. Our findings support the widely-held impression that certain character dimensions underlie the personalities of humans across cultures.

Keywords: Profile; Character; Urban; Nigerians; Cattell; 16-PF.

Introduction

Nigeria, "the giant of Africa," with approximately 100 million people, has frequently been in the news in recent times. In 1995, a very high-ranking USA army

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officer had to use newspaper advertisements abroad to apologize for earlier disparaging remarks on the character of Nigerians. The response of Nigeria's military government (embodied in the documentary entitled, "Not in our Character") suffered a credibility problem, as it was viewed as image-laundering propaganda by a most repressive regime, that used the achievements of a handful of Nigerians (some of whom it had forced into exile) to generalize on the characteristics of a multitribal nation.

Experiences resulting from daily interactions with our people revealed that many thoughtful Nigerians were in a quandary about what to believe about Nigerians. Consequently, we saw a need for an independent, systematic inquiry into the character and motivations of a broad segment of Nigerians. Findings from such a study should not only help the international community to better understand Nigeria's populace, but should also provide Nigerians with a reliable base from

which to better understand their potential for nationbuilding. Furthermore, data from such a study would contribute to the ongoing debate regarding the universality of personality structures (John, 1990). Previous studies of the personality of Nigerians focused on armed forces personnel (Eysenck, Adelaja, & Eysenck, 1977), secondary school students in a single city (Jegede, 1982), several women with fertility problems (Awaritefe, 1982), and the psychometric properties of a personality inventory (Oladele, 1987). In addition, Olobatuvi (1997) studied 306 Nigerian students in the USA, confirming the hypothesis that Nigerians would identify both with their ethnic groups and with their nations. When confronted with interactions with foreigners, the majority of Nigerian students would identify more with their nation than with their ethnic identity (Olobatuyi, 1997).

In studies abroad, reports of national personality characteristics have usually been based on the factor analysis of a large number of character descriptors. Using natural language descriptors (i.e., the lexical approach) and standard personality questionnaires (mostly Eysenck's Personality Questionnaire, EPQ, and Cattell's Sixteen Personality Factor Questionnaire, 16-PF), researchers have consistently revealed that similar personality factors can be identified across cultures. In at least 37 countries, researchers found evidence for the generalizability of the EPQ factors (i.e., neuroticism, extraversion, psychoticism, and social desirability; Eysenck, Barrett, & Barnes, 1993; Eysenck & Haapasalo, 1989; Hofstee, Kiers, de Raad, Goldberg, & Ostendorf, 1997; Lynn & Martin, 1995; Sanderman, Eysenck, & Arrindell, 1991). In addition, most researchers relying on the lexical approach (i.e., Cattell's 16-PF or the Neo-Personality Inventory) have identified five factors across cultures, which have been dubbed, "The Big Five" (Goldberg, 1993; Hofstee et al., 1997; John, 1990; McCrae & John, 1992; Noller, Law, & Comrey, 1987). These factors are extraversion, agreeableness (pleasantness), conscientiousness, neuroticism, and openness to experience (constituting John's, 1990, acronym of "the OCEAN of personality dimensions").

Big Five theorists claim that these factors, singly or in combination, can be found in virtually all personality instruments; hence, personality structure is universal (John, 1990). However, some researchers relying on the lexical approach but employing an expanded vocabulary have recovered seven factors across cultures, which consist of the Big Five plus two evaluative or *valence factors* (i.e., positive valence and negative valence; Almagor, Tellegen, & Waller, 1995; Bennet & Waller, 1995). A consistent finding in these factor analytic studies is that the labels given to the factors, as well as the items composing them, frequently differed (Boyle, 1989; John 1990; Vassend & Skrondal, 1995). Hence, researchers have described personality factors

Table 1
Identification with Response Options on 16-PF Polar
Names

	Negative Scale (<i>N</i> =48464)	Positive Scale (N=48464)
Very True	8301 (17.1%)	9132 (19%)
True	15584 (32.0%)	16904 (35%)
Sometimes	1380 (28%)	13615 (28%)
Neither True Nor False	2856 (6%)	2571 (5%)
Not At All	7960 (16%)	6240 (13%)

that are similar, but not isomorphic (Jackson, Paunonen, Fraboni, & Goffin, 1996). In recognition of this point, Peabody and Goldberg (1989) have recommended that we view the Big Five dimensions like a piece of classical music having a theme, with the differing descriptors representing variations on that theme. However, several researchers have labelled extraversion and neuroticism as "superfactors," because these have been the most-consistently replicated factors (Boyle, 1989).

Few factor analytic studies have been conducted in developing countries, especially in Africa. The few available studies suggest that methodologies and factors articulated in Western countries are reliably transferable to urban-educated participants in developing countries. Using the High School Personality Questionnaire (HSPQ) among Zimbabwan high school boys, Wilson, Sibanda, Sibanda, and Wilson (1989) found that the second-order factor structure of Cattell's HSPQ were recovered. Using the lexical approach with Indian undergraduates, Narayan, Menon, and Levine (1995) replicated the five-factor model, although a sixth factor emerged. Studies of personality traits have also found that the EPQ and the Adjective Check List can be reliably used in cross-cultural studies with educated respondents from Africa (Eysenck et al., 1977; Mwannwenda, 1996; Williams et al., 1995).

To our knowledge, there are no large scale studies that have attempted to delineate the personality characters of Africa's populace using factor analytic techniques. The present study used the categorical labels of Cattell's primary-order factors (as described by Hilgard, Atkinson, & Atkinson, 1979) to describe the general personality of a broad segment of educated urban Nigerians. A further aim was to determine whether factor analysis of these data would yield the factors that have been described for other cultures.

Method

Rationale for Use of Categorical Labels for Cattell's Primary-Order Factors

There is a need to explain and justify the theoretical basis underlying the use of the descriptors for the primary factor scales of Cattell's 16-PF, considering that this methodology is unusual and has not previously been reported.

First, given the varying educational attainments of the sample in the present study, it should have been appropriate to use Form C of Cattell's 16-PF, which consists of 105 items rated on a three-point scale (Cattell, Ebert, & Tatsuoka, 1970). However, use of labels (e.g., schizothymia-affectothymia; therectia-parmia; harria-premsia, etc.) would have intimidated the general reader. On the other hand, the equivalent factor labels provided in an American textbook of psychology (Hilgard et al., 1979) consist of simple, everyday-language descriptors of personality (see Table 3) that can be easily understood by people with at least a secondary school education. This was confirmed in a pilot study of approximately 150 medical and dental students, who were asked to rate themselves using Hilgard et al.'s (1979) 32-item descriptors (i.e., separated pairs of opposing factor labels). John (1990) noted that, for the lay person, personality is defined by such relatively simple terms; these are the basic ways by which individuals understand themselves and others. Mershon and Gorsuch (1988) argued that stronger predictions can be made from the individual scales of the 16-PF than from the higher-order factors they form.

Second, regarding the validity of using self-ratings based on only polar names of scales, Heather Cattell (1996, p. 10), quoting a personal communication with S. J. Guastello, noted that "self-ratings based only on polar names of scales were well-correlated with actual trait scores," although they were also often highly correlated with scores of different traits.

It is noteworthy that, in a historical review of the origins of the Big Five model, John (1990) remarked that Fiske (1949) constructed simplified descriptions from 22 of Cattell's variables and had used them to obtain trait ratings for 128 students; the factor structure derived did suggest five factors.

The reliability of single-item inventories is well-established in psychology (Lynn, 1982; Lynn & Martin, 1995; Ohaeri, 1998). For instance, Hofstede (1976) obtained mean neuroticism (anxiety) scores in 40 different nations using a single-item inventory consisting of answers to the question, "How often do you feel nervous or tense at work?" The responses were scored on a five-point scale. Lynn (1982) found that Hofstede's (1976) national mean scores correlated

with other measures of anxiety or neuroticism in the same countries.

Third, in a critique of the fourth and fifth factors in the Big Five model, Brand (1994) argued against the "love versus hate" contrast. He maintained that it was not viable to contrast love, empathy, and cooperation with aggression, autonomy, and competition. As stated by Brand (1994), "thinkers as diverse as Freud, Adler and Lorenz all maintained that there was no such intrinsic opposition ... Freud held that libido itself comprised the forces of both eros and thanatos. Adler ... came to distinguish personal interest as generally independent of, and not opposed to social interest. Lorenz drew particular attention to the higher levels of positive, cooperative social interaction in species distinguished equally by apparently high levels of aggressive drive and competition" (p. 303). In support of this point, McCrae, Costa, and Busch (1986) noted that "a moderate score on extraversion ... might be obtained by an individual who was energetic but aloof; or lethargic but friendly; or average on both energy level and sociability. For many purposes, these distinctions are essential" (p. 444).

Based on these theoretical considerations, we did not assume that personality descriptors, such as "reserved" vs. "outgoing." "affected by feeling" vs. "emotionally stable," or "tough-minded" vs. "sensitive" (as in Hilgard et al., 1979; see Table 3) were mutuallyexclusive pairs of characteristics. Accordingly, at the preliminary stage of the study, 150 medical and dental students in a psychology class were asked to rate themselves on the separated dimensions (e.g., "reserved," "outgoing," "affected by feeling," "emotionally stable," etc.). Their responses confirmed the impression that this would be a useful method of assessing personality in educated Nigerians. Hence, we constructed a 32item inventory of personality descriptors using the scale names of Cattell's primary factors, as described by Hilgard et al. (1979).

These descriptors are particularly useful for a general-population study in Nigeria, because they are devoid of pathological and ethically-objectionable content (Cattell et al., 1970). John (1990) noted that many personality scales measure the chronic negative emotions that are of importance to psychiatrists and clinical psychologists, while others, such as the 16-PF, measure interpersonal activities, which are important to social psychologists.

The Questionnaire

The questionnaire consisted of four parts. The first part concerned socio-demographic characteristics. The second and third parts were in line with the method in Williams et al.'s (1995) study, wherein a page of instructions and operational definitions of terms was followed by 32 16-PF primary factor labels (as in Hilgard

et al., 1979) rated on a five-point scale (see Table 1). Each item definition was brief, guided by the Oxford English Dictionary; simple paraphrases of primary factor labels of Form C of the 16-PF, as detailed by Harth, Johnstone, and Thong (1992), were used. For the purpose of data analysis, the first 16 items (e.g., reserved, timid, conservative) were operationally defined as the negative scale, while the remaining 16 items (e.g., outgoing, happy-go-lucky, venturesome) are operationally defined as the positive scale. The final part of the questionnaire consisted of items that were based on Maslow's (1943) hierarchy of needs, which assessed respondents' aspirations and motivations.

Procedure

In a pilot study, the initial version of the questionnaire was pre-tested using 150 medical and dental students in a psychology class to determine the questionnaire's ease of understanding and applicability. In addition, colleagues in the psychiatry and psychology departments of the University of Ibadan provided feedback regarding the construct validity of the questionnaire's items. The results of this pilot study indicated that Nigerians in urban areas with at least a secondary-school education would be able to understand the questionnaire and complete self-ratings in 30 to 45 min. Following the pilot study, 15 research assistants (consisting mostly of undergraduates and those with qualifications) were trained in assisting respondents who may have problems completing the questionnaire.

As there were no reliable census figures, it was not possible to generate a sampling framework for the target population in the present study. Hence, the sampling procedure followed that of Perussia (1995), which did not involve an attempt to obtain a sample representative of all Nigerians. Rather, the sample was formed by having trained research assistants contact a broad range (by tribe, occupation, and state capital of domicile) of articulate adult Nigerians who were active in the economy, and who would be the typical persons that a foreign visitor to the country would encounter. For such an articulate urban group, Olobatuyi (1997) suggested that, when confronted with interactions with foreigners, the majority of these Nigerians would identify more with their national than with their ethnic identity.

Participants: State of Domicile, Tribe of Origin and Occupation

Respondents were sampled from the 19 state-

capitals of Nigeria. The more than 200 ethnic groups in Nigeria can be divided into the three majority tribes and the minority tribes in the south-east, the southwest, the middle-belt, the far north-east and the northwest. An attempt was made to recruit respondents from each of these geo-ethnic groupings.

The occupation-based sampling method attempted to include undergraduate students (from the faculties of science, medicine, and arts), university lecturers, medical workers, civil servants, government employees (e.g., customs or telecommunications workers), bank employees, medium- to large-scale traders, and other businessmen and businesswomen.

Research assistants personally approached and explained the objectives of the study to participants at their places of employment or in lecture halls. Completed questionnaires were retrieved by research assistants.

Data Analysis

Data were analyzed by computer using frequency distributions, chi-square tests, and one-way analyses of variance (with Tukey's method of multiple comparisons). The responses to the 32 16-PF primary factors labels were subjected to a factor analysis using principal components analysis and a Varimax rotation. The Varimax rotation was deemed appropriate, as there were no significant intercorrelations among the resulting factors (Almagor et al., 1995; Garside & Roth, 1978; Vassend & Skrondal, 1995). The factor analysis employed the

Table 2
Relationship (Correlation) Between Opposing Pairs
(Positive and Negative) of Polar Names on Cattell's
16-PF (N=3029)

Opposing Pairs/Items	Pearson's r
Reserved / Outgoing	0.010
Less Intelligent/More Intelligent	-0.089
Affected By Feeling/Emotionally Stable	-0.018
Submissive / Domineering	0.100
Serious Minded/Happy-Go-Lucky	0.018
Expedient / Conscientious	0.149
Timid / Venturesome	0.040
Tough-minded / Sensitive	0.128
Trusting / Suspicious	-0.090
Practical / Imaginative	0.110
Forthright / Shrewd	0.030
Self assured / Apprehensive	-0.044
Conservative / Experimenting	0.085
Group Dependent / Self Sufficient	0.032
Uncontrolled / Controlled	-0.140
Relaxed / Tense	-0.080

¹ We have communicated with Steven Guastello regarding this issue, and learnt that his data were not yet prepared for publication.

employed the criterion of factor salience that is conventional in personality studies (i.e., factor loadings > 0.3; Vassend & Skrondal, 1995). The level of statistical significance was set at .05.

Psychometric Properties of the Questionnaire

The frequency with which the 3029 respondents chose each of the response options (i.e., "very true" to "not true at all") for the positive and negative scales was calculated by dividing the number of responses for each option by the total number of possible responses (Becerra, 1988).

Table 1 shows that the proportion of responses was distributed evenly across response options without a significant bias toward true responses for the positive scale. This result is a good indicator of the acceptability of the questionnaire and the reliability of responses (Becerra, 1988).

The correlation of responses between the polar characteristics of each dimension on the two scales (e.g., reserved vs. outgoing) was examined next. This analysis permitted the determination of response polarization in each dimension (e.g., whether respondents claimed to be simultaneously reserved and outgoing). Table 2 shows that the correlations between these opposing characteristics were very low (most rs<0.1) and not significant. Therefore, there was no significant trend towards confusing the meaning of these psychological characteristics.

Thereafter, Cronbach's alpha was calculated to evaluated the internal consistency of responses to the 32 items. The standardized item alpha for the positive scale was 0.73, while that for the negative scale was 0.79. For the combined 32 items, the alpha value was 0.85, with a standardized item alpha of 0.85.

These results indicate that respondents had a good understanding of the questionnaire, that they identified well with the items, and that their responses were satisfactorily reliable.

Results

Of the 3029 participants that responded, 1861 (61.4%) were males and 1145 (37.8%) were females. Thirteen participants (0.4%) did not state their sex. The mean age of participants was 30.4 years (SD=9.7). The tendency was for males to be older (M=31.1 years; SD=9.1) than females (M=28.6 years; SD=10.8), but this trend was not statistically significant (p > .05). Respondents originated from all 30 states of the federation (prior to the creation of a further six states in October, 1996) and Abuja, the Federal Capital Territory. The sample was representative of the distribution of the majority and minority ethnic groups in the country. The broad occupational groups were represented in the sample, including those working in the civil service, in institutions of higher learning, in government sectors, and those working in the private sector. The current study is focused on the national picture of Nigerians, and will thus not concern group and gender differences.

Table 3
Frequency of Personality Characteristics of Nigerians (N=3029)

Negative Scale Characteristics	True/Very True Responses (%)	Positive Scale Characteristics	True/Very True Responses (%)	
Reserved	1826 (60.3%)	Outgoing	1676 (55.3%)	
Less Intelligent	490 (16.2%)	More Intelligent	2253 (74.3%)	
Affected By Feeling	1338 (44.2%)	Emotionally Stable	1947 (64.3%)	
Submissive	1155 (38.1%)	Domineering	1035 (34.2%)	
Serious Minded	2074 (68.5%)	Happy-Go-Lucky	1221 (40.3%)	
Expedient	1795 (59.3%)	Conscientious	2272 (75.0%)	
Timid	609 (20.1%)	Venturesome	1477 (48.8%)	
Tough Minded	1146 (37.8%)	Sensitive	2102 (69.4%)	
Trusting	1869 (61.7%)	Suspicious	987 (32.6%)	
Practical	2326 (76.8%)	Imaginative	1774 (58.6%)	
Forthright	2201 (72.7%)	Shrewd	1278 (42.4%)	
Self Assured	2263 (74.7%)	Apprehensive	1110 (36.6%)	
Conservative	1299 (42.9%)	Experimenting	1883 (62.2%)	
Group Dependent	807 (26.6%)	Self-sufficient	1916 (63.3%)	
Uncontrolled	591 (19.5%)	Controlled	2315 (76.4%)	
Relaxed	2096 (69.2%)	Tense	790 (26.9%)	

Note. Row totals do not add up to 100% because items of opposing pairs of characteristics were rated independently of each other.

Frequency of Personality Characteristics

Several personality descriptors were endorsed by fewer than 40% of participants, suggesting that these descriptors were not valued by this sample of Nigerians (viz., being less intelligent, submissive, timid, tough-minded, group-dependent, uncontrolled, domineering, suspicious, apprehensive, and tense; see Table 3). On the other hand, character descriptors that could be presumed as being highly-valued (i.e., those with

over 55% endorsement) were: being reserved, outgoing, serious minded, expedient, trusting, practical, forthright, self-assured, relaxed, intelligent, emotionally stable, conscientious, sensitive, imaginative, experimenting, self-sufficient, and controlled. These characteristics average out to describe Nigerians as being predominantly open-minded, productive, aggressive, and confident persons, thus typifying the average persons that one encounters in workplaces in Nigerian cities.

Interestingly for a developing country, only about a

Table 4
The Big-7 Model from the 32 items of 16-PF Primary Factor Scales

Cattell's PF Items	Factor 1 (neuroticism)	Factor 2 (extraver- sion)	Factor 3 (positive valence)	Factor 4 (openness)	Factor 5 (serious- mindedness/ conscientiousness)	Factor 6 (agreeable- ness / pleasant- ness)	Factor 7 (negative valence)
Reserved	0.08	0.17	0.12	-0.08	0.15	0.07	0.64*
Less Intelligent	0.62*	-0.06	-0.09	0.08	-0.13	0.22	0.21
Affected by Feelings	0.25	0.01	0.11	-0.16	0.39*	0.50*	-0.07
Submissive	0.28	0.09	-0.08	0.05	0.03	0.60*	0.22
Serious-Minded	-0.04	-0.04	0.26	0.26	0.55*	0.18	0.18
Expedient	0.27	0.14	0.53*	-0.19	0.03	-0.19	0.19
Timid	0.64*	-0.00	-0.06	-0.13	0.02	0.23	0.19
Tough-Minded	0.36*	-0.11	0.23	0.41*	0.21	0.07	-0.11
Trusting	0.02	0.09	0.37*	0.09	-0.02	0.63*	-0.06
Practical	-0.06	0.06	0.58*	0.23	0.23	0.08	0.10
Forthright	-0.06	0.09	0.65*	0.12	0.13	0.06	0.10
Self-assured	-0.12	0.29	0.58*	0.09	0.02	0.19	0.01
Conservative	0.33*	0.05	0.14	0.08	-0.05	-0.01	0.59*
Group-Dependent	0.54*	-0.04	-0.00	0.20	-0.08	0.20	0.28
Uncontrolled	0.69*	-0.09	-0.02	0.16	-0.07	0.20	0.06
Relaxed	-0.02	0.22	0.24	0.46*	-0.09	0.02	0.30*
Outgoing	0.34*	0.34*	0.36*	0.19	-0.12	0.02	-0.24
More Intelligent	-0.06	0.48*	0.05	0.33*	0.22	0.04	0.04
Emotionally Stable	0.01	0.37*	0.13	0.52*	0.09	-0.06	0.09
Domineering	0.55*	0.20	0.07	0.30*	-0.01	-0.16	-0.02
Happy-go-lucky	0.44*	0.32*	0.26	-0.05	-0.17	0.14	-0.14
Conscientious	-0.07	0.47*	0.26	0.04	0.28	-0.11	0.12
Venturesome	0.23	0.19	0.03	0.58*	0.16	0.04	-0.21
Sensitive	0.11	0.29	0.06	0.05	0.59*	0.04	0.07
Suspicious	0.62*	0.07	-0.06	0.12	0.31*	-0.20	0.02
Imaginative	0.35*	0.21	0.12	0.06	0.47*	-0.09	0.12
Shrewd	0.58*	0.17	0.07	0.10	0.12	-0.09	0.00
Apprehensive	0.66*	0.09	0.02	-0.13	0.21	-0.02	0.01
Experimenting	0.25	0.54*	0.17	0.07	0.12	-0.02	-0.07
Self-sufficient	0.16	0.63*	0.08	0.06	-0.06	0.09	0.05
Controlled	-0.11	0.64*	0.05	0.12	0.14	0.02	0.24
Tense	0.66*	0.06	-0.06	-0.13	0.14	0.17	-0.04
Eigen Value	5.79	3.29	1.58	1.26	1.20	1.09	1.02
Proportion of Variance	0.181	0.103	0.049	0.039	0.038	0.034	0.032
Cumulative Variance	0.181	0.284	0.33	0.373	0.411	0.445	0.477

^{*} indicates significant factor loadings (≥ 0.3)

quarter of participants agreed to being group-dependent. Further, over 55% of participants endorsed some apparently opposing pairs of characteristics (viz., reserved/outgoing, expedient/conscientiousness, and practical/imaginative). It is noteworthy that the majority of participants considered themselves as serious-minded (68.5%) rather than happy-go-lucky (40.3%).

Factor Analysis

Seven factors emerged with Eigen values above 1.0, accounting for 47.7% of the variance (see Table 4). Interestingly, these factors bear close resemblance to the "Big Five" factors, plus the two valence factors that constitute the "Big Seven" factors.

The first factor was a neuroticism factor with highly-significant loadings on being less intelligent, timid, uncontrolled, suspicious, apprehensive, and tense (all over 0.6). This factor had the highest loadings on all of these items.

The second factor was an extraversion factor with significant loadings on being outgoing, intelligent, emotionally stable, happy-go-lucky, experimenting, self-sufficient, and controlled.

Factor 3 loaded significantly on what could be termed value-based or evaluative descriptors of character, such as being trusting, practical, forthright, self-assured, and expedient. Hence, this factor was labelled Positive Valence, in line with the proponents of the Big Seven model. By the same consideration, factor 7 was labelled Negative Valence, as it loaded highly significantly on evaluative terms, such as being reserved and conservative. Factor 7 had the highest loadings on these two items.

Factor 4 was labelled Openness, as it loaded significantly on being more intelligent, relaxed, venturesome and emotionally stable. This factor had the highest loading on being venturesome, in line with findings of other researchers.

The credentials of factor 5 as a Conscientiousness factor was weakened, as it barely loaded significantly on this item. However, we think it merits this label because it loaded highest on serious-minded and imaginative, while also loading significantly on several other ordinary-language descriptors of the conscientious person.

Factor 6 was an Agreeable/Pleasantness factor because it loaded highest on being submissive, trusting and affected by feeling.

Discussion

A major limitation of the present study is that respondents were not a representative sample of the Nigerian society; hence, the findings are not generalizable. Since the study was not funded, insufficient re-

sources were available for meeting the requirements of a rigorous sampling technique without a reliable census figure and sampling framework (especially because of the political and socioeconomic turbulence that was prevalent in Nigeria at the time of the study). However, we sought to make up for this deficiency by restricting the sampling to educated Nigerians residing in urban areas, and ensuring the recruitment of a large number of participants from the widest breadth of tribal, occupational, and domicile circumstances within that group. By this process, responses were obtained from a group that was usually referred to as "Westernized," thereby making results comparable with reports from developed countries. The advantage of this convenience sample is that respondents readily understood the questionnaire, thereby avoiding the usual problem of the applicability of questionnaires from an external cultural framework (i.e., the etic perspective; Marsella & Leong, 1995).

Another limitation of the current study was the rather unorthodox use of the questionnaire. Given the social and political climate prevalent in Nigeria at the time of the study, and the limited material resources of the authors, having busy workers comply with completing the 105-item Form C of Cattell's 16-PF would have been quite difficult. However, the psychometric properties of the version of the questionnaire used in the present study were quite satisfactory, providing the reliable responses required to meet the objectives of the study. Moreover, the polar names that were used were similar to natural language descriptors of personality, akin to the lexical approach (John, 1990).

Personality Characteristics

The respondents in the current sample were young and economically-active urban residents, who were useful for cross-national comparisons of national character, because it is from among this class that the nation chooses those who carry its banners abroad in sports and in academic and business activities. At home, their social class constitutes the hands and feet of the economy, and are the mirror through which the national character is reflected in workplaces and leisure spots.

Therefore, it is beneficial for Nigeria's national image that these respondents predominantly saw themselves in a positive light as an open-minded, productive, aggressive, serious-minded, and confident group of persons. Indeed, this was the positive image that government propagandists attempted to sell abroad in the wake of disparaging remarks on the character of Nigerians. From the results of this study, it is reasonable to suggest that this positive image is reflective of educated, urban Nigerians.

Only a few of the respondents in the present study endorsed the group-dependent trait, which has been a bane to Nigeria's social and political emancipation. Clearly, this is a benefit of being educated and gainfully employed; therefore, it is hoped that such benefits will become more evident as the educational system and industrial climate improve.

Although respondents simultaneously endorsed three opposing pairs of character descriptors, these are largely inherently positive characteristics. Furthermore, the results of the correlation analysis (see Table 2) indicated that the individuals who endorsed these opposing characteristics were not the same. In any case, this finding underscores the earlier point highlighted by Brand (1994), that thinkers as diverse as Freud, Adler, and Lorenz did not support such intrinsic opposition in personality characteristics. One surprising finding was that a slightly higher proportion of participants, although not significant, admitted to being reserved (60.3%) rather than outgoing (55.3%). This trend counters the general stereotypic impression that Nigerians are boisterous. However, in a comparison of Nigerian armed forces personnel and English participants using the EPQ, it was found that, while the Nigerians scored lower on neuroticism and higher on social desirability, no conclusion could be reached about the extraversion scale (Eysenck et al., 1977). The researchers thus concluded, "as far as [extraversion] is concerned ... [it is] difficult to come to any conclusion; it is possible that Nigerians are a little more extraverted than the English, but little confidence is felt that this conclusion would be upheld in subsequent work" (p. 176).

Factor Analysis

Jackson et al. (1996) suggested that one gets out of factor analysis what one puts into it. Since factors are labelled by carefully examining personality descriptors obtained under each factor (Narayan et al., 1995), the descriptors of factors derived from our data are limited to the 32 items of the questionnaire.

Within this limitation, it was therefore interesting to see that the descriptors that loaded significantly on the seven factors derived in the current study were similar to the natural language descriptors of the Big Five model (John 1990; McCrae & John, 1992) plus the two valence factors that make up the Big Seven model (Benet & Waller, 1995). It is noteworthy that, in a factor-analytic study of India (Narayan et al., 1995), the researchers obtained factors that were similar to the Big Five model, plus one valence factor.

Similar to the seven-factor solution of Almagor et al. (1995) from Israel, in which the seven factors accounted for 46% of total variance, the seven factors in the current study accounted for 47.7% of the total variance. In keeping with the findings of Jackson et al. (1996) from Canada and Brand (1994) from Scotland, the factors that had shaky foundations were conscien-

tiousness and openness. And, in support of all previous work in this field, neuroticism and extraversion were the most robust factors (Boyle, 1989).

Conclusion

Our findings support the widely-held impression that certain character dimensions underlie the personality of humanity across cultures, be they the Big Five, the Big Seven, or two superfactors (Boyle, 1989; John, 1990). In a study of 676 Nigerian armed forces personnel, Eysenck et al. (1977) found that, using the EPQ, a similar four-factor solution was recovered as that obtained from a comparable English sample. As Kluckhohn and Murray (1950) said, "every man is in certain respects: (a) like all other men, (b) like some other men, and (c) like no other man" (p. 35). Marsella and Leong (1995) elaborated on this to state that "he is like all other men because of some of the determinants of his personality which are universal to the species ... common features in the biological endowments of all men" (p. 214). The psychobiological endowments that underlie these seemingly universal personality dimensions have been the source of debate in recent years (Costa & McCrae, 1992; Eysenck, 1992; Zuckerman, 1992).

Like findings of researchers from India and Zimbabwe, our findings support the impression that the techniques and models of personality assessment developed in the Western world can be transferred to other cultures in the milieu of educated, sociallysophisticated urban elites. Consequently, it would be useful to conduct an in-depth study that would aim to describe the national character using a more representative sample.

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