

## **Psychological Analysis of Employees of the Same Gender, Job Cadre across Ethnic Groups in Nigerian Organisations**

**Dr Akintayo Olufemi Akinwumi<sup>1</sup>**

### **Abstract**

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The study looked at the psychological analysis of employees of the same gender, job cadre across the three main ethnic groups in Nigeria including the minorities. The objectives of the research were to determine the differences/similarities between employees of the same gender/work cadre across the ethnic groups in Nigerian Organisations. To do this, the researcher considered the personality factors of the employees such as psychoticism, extraversion/introversion, and neuroticism; job characteristics such as satisfaction with work, pay, promotion, supervision and co-worker; work group functions such as group homogeneity, group goal clarity, group cohesiveness, open group process and internal fragmentation; organisational commitment dimensions such as identification, involvement and loyalty; locus of control and job involvement. To achieve these objectives, data were collected from 520 manufacturing workers from Sharada Industrial Estate, in Kano state; Trans Amadi Industrial layout, Aba, in Imo State and Apapa Industrial layout, in Lagos State of Nigeria using six standardised psychological instruments with appropriate psychometric properties. The instruments used are: Eysenck personality questionnaire (EPQ), Job descriptive index questionnaire (JDI), Work group functions scale (WGFs) and Organisational commitment scale (OCs); Locus of control and Job Involvement questionnaires. The participants consisted of 260 males and 260 females with age between 23 and 65 years. They were randomly selected from the companies. The sample consisted of senior and junior workers distributed across the companies. The workers responded to the six testing instruments used for the study and biographical information questionnaire and their responses were subjected to statistical analysis using the SPSS statistical package. Means and standard deviations were calculated to obtain descriptive results. One way Anova and Scheffe tests were carried out to obtain inferential results. The results showed that both junior and senior female employees differ significantly across ethnic groups in Nigerian organisations. Male junior and senior employees are not different in most of the variables under consideration across ethnic groups in Nigerian organisations.

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### **Introduction**

The researcher set out to find out if the same sex type/work cadre is the same across the different ethnic groups in Nigeria. To carry out this research, seven psychological instruments were employed. These are the personality characteristics of the workers, their job characteristics, work group functions, job satisfaction of the workers, and their locus of control and job involvement. Personality characteristics as having the following components: (i) Psychoticism, which is the extent of an individual's tough mindedness; (ii) Extraversion/introversion which is the extent of an individual's social interaction with other people; and (iii) Neuroticism which is the extent of an individual's emotionality. Job characteristics consist of five components: work on present job; present pay; opportunity for promotion; supervision on present job; co-worker on present job (Akintayo, 2013a).

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<sup>1</sup> Department of Psychology, University of Lagos. E-mail address: oakintayo@unilag.edu.ng

Group processes involve work group functions which are concerned with social psychological processes in the work environment, attitudes and perception of employees to work and group dynamics in work organisation (Akintayo, 2013b).

There are five sub-scales in group processes comprising:

**(i) Group homogeneity** which is the possession of complimentary characteristics by group members **(ii) Group goal clarity** which is the possession of performance and achievement focus by the group **(iii) Group cohesiveness** which is the feelings of affinity by group members **(iv) Open group process** which is the openness of duties and **(v) Internal fragmentation** which is the discord among members (Akintayo, 2014)

Organisational commitment which is the extent to which a worker is affectively attached to the achievement of the goals and values of an organisation, with particular emphasis on the role the worker selflessly plays in the process of the attainment of that achievement.

Organisational commitment comprises three components as stated below

**(a) Identification** which is the adoption of organisational goals as one's personal goals

**(b) Involvement** which is being psychologically immersed in work-role activities

**(c) Loyalty** which is affection and attachment to an organisation (Akintayo, 2013a).

Job involvement is defined as the degree to which a person identifies psychologically with his/her job and considers his/her perceived performance level important to self worth.

Job involvement is the degree to which a person identifies psychologically with his/her job and considers his/her perceived performance level important to self worth. Employees with a high level of job involvement strongly identify with and really care about the kind of work they do. High levels of job involvement have been found to be related to fewer absences and lower resignation rates. However, it can also consistently predict turnover than absenteeism, accounting for as much as 16% of the variance in the former. Akintayo (2009) asserted that people may be stimulated by and drawn deeply into their work, or they may be alienated from it mentally and emotionally. The quality of one's entire life can be greatly affected by one's degree of involvement in, or alienation from, their work. Brown stated: "A state of involvement implies a positive and relatively complete state of engagement of core aspects of the self in the job, whereas a state of alienation implies a loss of individuality and separation of the self from the work environment". Job involvement is the degree to which a person is identified psychologically with his work or the importance of his work in his total self image. It is one of the important individual differences to the organisation. Job satisfaction is a set of feelings of contentment people have from their jobs. It is also thought of as a set of attitudes the employees hold about the work tasks and environment. Job satisfaction is further explained as 'a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences.

Job satisfaction is a set of feelings of contentment people have from their jobs. It is also thought of as a set of attitudes the employees hold about the work tasks and environment. Job satisfaction is an attitude people have about their jobs. It is the feelings a worker has about his/her job or job experiences in relation to previous experiences, current expectations, or available alternatives (Akintayo, 2009). Job satisfaction is further explained as 'a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences. Job satisfaction as such is presumed to be a global construct encompassing such specific facets of satisfaction in form of satisfaction with work, pay, supervision, promotion opportunities, cooperation from co-workers and positive organisational practices. Job satisfaction is an important attitude that individuals have about their jobs. It results from the perceptions of their jobs, based on factors of the work environment, such as the positive supervisor's style, policies and procedures, work group affiliation, working conditions and fringe benefits. Job satisfaction is in regard to one's feelings or state of mind regarding the nature of their work. It can be influenced by a variety of factors, like the quality of one's relationship with their supervisor, the quality of the physical environment in which they work, degree of fulfilment in their work, etc. While numerous dimensions have been associated with job satisfaction, five of these dimensions in particular have crucial characteristics. It is the individual's expression of personal well being associated with doing the job assigned. Job satisfaction is the fulfilment a worker derives from his/her input into the job environment. It also implies the fulfilment the job environment provides a worker. The fulfilment also comprises three components that form intrinsic, extrinsic and general.

Intrinsic satisfaction is the value an individual finds in performing the work in and of itself. Extrinsic satisfaction is the value in providing the necessities of life and serving as a channel for the individual talents, abilities and knowledge. Locus of control consists of (i) internal and (ii) external. Internal locus of control is the tendency to attribute to the self the causes of happenings and events in the individual personal life. External locus of control is the tendency to make attributions to others or to external sources. Similarly, internalisers are therefore inner directed while externalisers are other directed. Locus of control is therefore a personality characteristic. Each person makes assumptions about the people with whom he or she works, supervises, or spends time in leisure activities. These assumptions, to some extent, influence a person's behaviours toward others. Effective managers understand the psychological influences that affect their own behaviour before attempting to influence the behaviour of others. Individual behaviour is the foundation of organisational performance. Internal locus of control is the tendency by an individual to attribute to the self the causes of happenings and events in the individual personal life. External locus of control is the tendency to make the attributions to the others or to external sources. While internalisers are therefore inner directed, externalisers are other directed. Locus of control is therefore a personality characteristic (Akintayo, 2009).

### **Objectives**

1. To find out if junior female employees will differ significantly across ethnic groups in Nigerian organisations
2. To find out if junior male employees will differ significantly across ethnic groups in Nigerian organisations
3. To find out if senior female employees will differ significantly across ethnic groups in Nigerian organisations
4. To find out if senior male employees will differ significantly across ethnic groups in Nigerian organisations

### **Research Questions**

1. Will junior female employees differ significantly across ethnic groups in Nigerian Organisations?
2. Will junior male employees differ significantly across ethnic groups in Nigerian Organisations?
3. Will senior female employees differ significantly across ethnic groups in Nigerian Organisations?
4. Will senior male employees differ significantly across ethnic groups in Nigerian Organisations?

### **Hypotheses**

1. Junior female employees will differ significantly across ethnic groups in Nigerian organisations
2. Junior male employees will differ significantly across ethnic groups in Nigerian organisations
3. Senior female employees will differ significantly across ethnic groups in Nigerian organisations
4. Senior male employees will differ significantly across ethnic groups in Nigerian organisations

### **Method**

This section presents the methods applied in carrying out the study, location/research setting, the study population, sample selection and characteristics, research design and instrumentation.

#### **Study Location/Research Setting**

Manufacturing workers from Sharada Industrial Estate, Kano; Trans Amadi Industrial layout, Aba, in Imo State and Apapa Industrial layout, in Lagos State of Nigeria were used for the study. This setting was considered for the study as a result of its contributions to the political, social and economic growth of the Nation. Manufacturing companies are also big employers of labour. The choice of the companies as the focus of the study was influenced by the predominantly presence of all the Nigerian ethnic groups in order to obtain objective results.

#### **Study Population**

The sampled Nigerian workers in all the companies had a minimum of Senior Secondary School Certificate/GCE (Ordinary level) and were earning regular income. Moreover, they have spent at least one year in their respective organisations as at the time of data collection in order to ensure that they have the required adequate job characteristics. The participants also included both married and single workers.

#### **Sample Selection and Sample Characteristics**

The participants were selected from companies from the Northern, Eastern and Western parts of Nigeria

### The Sample: Showing Location and Gender Sample of Participants

The 520 participants selected from Apapa, Lagos, Sharada Industrial Layout Kano, and Trans Amadi Industrial Layout, Aba, Imo State of Nigeria consisted of 260 males and 260 females respectively. Their ages range from 23 to 65 years. The participants were selected from the employees who had a minimum of Senior Secondary School Certificate / General certificate of Education Ordinary level with a regular income.

### Research Instruments

The following research instruments:

- (i) Eysenck Personality Questionnaire (EPQ),
- (ii) Organisational Commitment Scale (OCS),
- (iii) Job Involvement Questionnaire (JIQ),
- (iv) Job Descriptive Index (JDI),
- (v) Minnesota Satisfaction Questionnaire (MSQ),
- (vi) Nowick-Strickland Locus of control Scale (NSLCS),
- (vii) Work Group Functioning Scale (WGFS), and
- (viii) Biographical Information Questionnaire (BIQ) were used for data collection in testing of all the hypotheses under study

### Results

Tables 1-3 are results for hypothesis 1. It gave the results for the descriptive statistics, Anova and Scheffe tests.

**Table 1: Comparison of 260 Female Junior Managers for the Ethnic Groups**

VARIABLES	65 (HFJM)		65 (IFJM)		65 (OFJM)		65 (YFJM)	
	X	$\sigma$	X	$\sigma$	X	$\sigma$	X	$\sigma$
1. Psychoticism	5.04	1.399	3.00	1.756	4.16	2.897	3.04	2.318
2. Extraversion/introversion	12.64	2.447	11.92	4.396	13.32	3.473	11.76	4.326
3. Neuroticism	9.76	2.962	8.60	2.533	12.00	4.133	10.20	4.664
4. Work satisfaction	25.80	5.276	37.00	7.544	32.64	11.926	35.12	11.366
5. Pay satisfaction	20.08	7.884	24.48	9.243	26.08	14.32	28.48	15.587
6. Promotion satisfaction	22.00	6.403	28.96	12.016	25.28	13.43	28.60	13.802
7. Supervision satisfaction	22.76	6.495	34.08	11.539	31.04	14.758	39.36	7.718
8. Co – worker satisfaction	28.68	7.42	39.76	10.864	38.56	15.324	42.44	11.655
9. Intrinsic satisfaction	38.32	7.825	43.12	6.153	43.04	5.675	41.12	8.288
10. Extrinsic satisfaction	19.76	4.675	19.72	4.238	20.04	3.102	21.16	5.46
11. General satisfaction	65.44	11.188	70.04	9.791	71.32	8.199	68.64	13.369
12. Identification	23.84	3.826	32.36	5.758	30.80	8.426	29.56	7.616
13. Involvement	25.04	4.036	29.12	5.703	24.16	4.989	26.44	5.731
14. Loyalty	38.12	6.254	47.16	12.632	41.04	9.131	47.28	7.408
15. Homogeneity	10.68	2.462	12.00	2.041	10.96	2.031	10.76	3.113
16. Goal clarity	16.76	4.236	18.32	3.682	17.12	2.538	18.36	3.796
17. Cohesiveness	11.32	2.212	9.76	2.919	8.24	1.091	8.20	1.155
18. Open group process	12.08	4.60	10.64	3.64	12.04	3.68	11.72	4.354
19. Internal fragmentation	9.68	3.567	10.24	2.818	11.04	2.189	11.64	2.325
20. Locus of control	19.08	3.013	10.68	4.88	16.24	4.465	13.72	5.587
21. Job involvement	47.24	4.859	42.64	6.116	45.44	3.392	41.76	6.476

Table 1 shows the mean scores (X) and standard deviations ( $\sigma$ ) of the 260 female junior managers for the 4 ethnic groups on the 21 variables. Psychoticism in Igbo female junior managers (IFJM) is 1.756, cohesiveness in others and Yoruba are 1.091 and 1.155 respectively. The results show that Hausa Female junior managers (HFJM) are higher in psychoticism (5.04), cohesiveness (11.32), open group process (12.08), locus of control (19.08) and more job involved (47.24) than Igbo, others and Yoruba counterparts.

For Igbo female junior managers they are more satisfied with their work (37.00), promotion (28.96), they identify more (32.36) and more involved (29.12) with their jobs and more homogenous (12.00) than their Hausa, Yoruba and others counterparts. The others female junior managers (OFJM) exhibited higher extraversion/introversion (13.32), neuroticism (12.00) and intrinsically (43.04) and generally satisfied (71.32) with their jobs than Hausa, Igbo, and Yoruba counterparts. Finally, the Yoruba female junior managers (YFJM) are more satisfied with their pay (28.48), supervision (39.36), co-workers (42.44), extrinsically more satisfied (21.16), more loyal (47.28), higher goal clarity (18.36) and internal fragmentation (11.64) than their Hausa, Igbo and others counterparts. The scores are subjected to one-way analysis of variance to determine the level of differences that occur among the four categories of female junior employees

**Table 2: Summary of One –Way Anova as Applied to 260 Female Junior Managers for the Ethnic Groups (Significant Effects Only)**

VARIABLES	SUM OF SQUARES	F
1. Psychoticism	.555.79	5.591*
2. Neuroticism	1446.04	3.689**
3. Work satisfaction	10293.24	6.174*
4. Promotion satisfaction	13488.24	3.364**
5. Supervision satisfaction	14481.39	10.651*
6. Co-workers satisfaction	16870.04	6.000*
7. Identification	5234.24	6.930*
8. Involvement	2909.39	4.408*
9. Loyalty	8994.91	10.106*
10. Cohesiveness	547.56	13.802*
11. Locus of control	2958.91	14.909*
12. Job involvement	3225.71	5.576*

\*\*P < 0.01 Critical = 3.78; \*P < 0.05. Critical = 2.60

The results in Table 2 indicate that there are significant differences among female junior managers and among the 4 ethnic groups in 12 of the 21 variables. Out of the 12 significant differences, two were significant namely; Neuroticism and promotion satisfaction at ( $F=3.78$ ,  $df = 3/96$ ,  $p < 0.01$ ) and 10 were significant at ( $F=2.60$ ,  $df = 3/96$ ,  $p < 0.05$ ). These variables are psychoticism, work satisfaction, supervision satisfaction, co-worker satisfaction, organisational commitment (identification, involvement and loyalty) cohesiveness, locus of control and job involvement. However, the female junior managers did not significantly differ in extraversion/introversion; pay satisfaction, intrinsic satisfaction, extrinsic satisfaction, overall satisfaction, homogeneity, goal clarity, open group process and internal fragmentation. The results are in support of Hypothesis 1 which states that junior female employees will differ significantly across the 4 ethnic groups in Nigerian organisations Scheffe test was also used to analyse the 12 significant F-ratios in Table 2 so as to determine the pairs of ethnic categories of female employees in which significant differences occur. The outcome of the analysis is shown in Table 3.

**Table 3: Scheffe Test for Significant F- Ratios in Table 2**

Variables	Yoruba vs Igbo	Yoruba Vs Hausa	Yoruba Vs Others	Igbo Vs Hausa	Igbo vs others	Hausa vs others
1. Psychoticism	-0.08	-2.00*	-1.48	2.08*	-1.56	0.52
2. Neuroticism	1.60	0.44	-1.80	1.16	-3.40*	-2.24
.Job characteristics						
3. Work satisfaction	-1.88	8.92*	2.48	-10.80*	4.36	- 6.44
4. Supervision satisfaction	5.28	16.60*	8.32	11.32*	3.04	-8.28
5. Co-worker satisfaction	+2.68	13.76*	5.88	11.08*	3.20	-7.88
6. Identification	-2.80	5.32	-1.24	8.12*	1.56	-6.56*
7. Involvement	-2.68	1.40	2.28	4.08	4.96*	0.88
8. Loyalty	-2.40	9.16*	6024	11.56*	8.64*	-2.92
9. Cohesiveness	-1.56	-3.12*	-0.04	-1.56	1.52	3.08*
10. Locus of control	3.44	4.96*	-2.12	-8.40*	-5.56*	2.84
11. Job involvement	-0.88	-5.48*	-3.68	-4.60*	-2.80	1.80

To cope with the analytical needs of a multigroup comparison, a statistical technique, the analysis of variance called the F test was employed. The F test is a statistical technique employed to deal with the problem of significant differences encountered when more than two groups are involved. If the F turns out to be significant, which means it is larger than critical F, it means that those variables are significant. But a significant F does not indicate in which groups significant differences occur. To do this, a multiple-group comparison test was performed called the Scheffe test. The results in Table 3 indicate that the highest number of significant differences in the variables was found between Yoruba and Hausa female junior managers and Igbo and Hausa female junior managers, they differ significantly in eight out of the twelve variables. For Yoruba and Hausa, they differ in psychoticism (-2.00), work satisfaction (8.92), supervision satisfaction (16.60), co-workers satisfaction (13.76), loyalty (9.16), cohesiveness (-3.12), locus of control (4.96) and job involvement (-5.48). For Igbo and Hausa, they differed in psychoticism (2.08), work satisfaction (-10.80), supervision satisfaction (11.32), co-worker satisfaction (11.08), identification (8.12), loyalty (11.56), locus of control (-8.40) and job involvement (-4.60). The next pair of comparison was found between Igbo and others. They differ significantly in four of the 12 variables. These variables are Neuroticism (-3.40), organisational commitment -involvement (4.96) and loyalty (8.64) and locus of control (-5.56). The next pair of comparison was found between Hausa and others. They differ significantly in two of the 12 variables. These are identification (-6.56) and cohesiveness (3.08). Yoruba and Igbo; Yoruba and others did not differ significantly in any of the 12 variables. From the results, no variable distinguish between all the pairs of groups. On the other hand, promotion satisfaction did not significantly distinguish between any pair of the categories of employees. The results support Hypothesis 1 which states that there will be significant differences between female junior employees across the four ethnic groups in Nigerian organisations.

**Tables 4-6** are results for hypothesis 2. It gave the results for the descriptive statistics, Anova and Scheffe tests.

**Table 4: Comparison of 260 Male Junior Managers for the Ethnic Groups**

VARIABLES	65 (HJMM)		65 (IJMM)		65 (OJMM)		65 (YJMM)	
	X	$\sigma$	X	$\sigma$	X	$\sigma$	X	$\sigma$
1. Psychoticism	5.36	5.147	4.16	2.809	3.36	1.89	3.96	3.385
2. Extraversion/introversion	11.24	3.407	12.56	3.72	14.08	2.886	12.44	4.312
3. Neuroticism	9.72	2.354	10.24	5.15	7.72	3.623	9.40	4.583
4. Work satisfaction	36.08	10.352	35.36	9.174	34.52	12.862	33.76	12.18
5. Pay satisfaction	29.60	12.871	31.92	14.95	21.68	15.84	30.08	16.036
6. Promotion satisfaction	34.64	13.301	32.16	12.986	25.84	12.205	22.56	13.16
7. Supervision satisfaction	37.36	10.59	39.04	9.637	35.32	13.963	32.84	14.67
8. Co – worker satisfaction	44.52	9.862	41.04	11.458	46.52	9.786	37.92	14.465
9. Intrinsic satisfaction	44.92	9.983	45.72	7.987	46.72	6.341	44.40	10.412
10. Extrinsic satisfaction	21.72	4.677	20.60	4.416	21.40	3.819	19.68	4.20
11. General satisfaction	73.76	12.337	73.00	9.242	75.48	9.892	72.40	9.327
12. Identification	32.28	8.739	31.16	7.565	32.36	6.714	28.92	8.534
13. Involvement	29.24	4.798	27.84	5.886	28.24	5.819	26.92	8.036
14. Loyalty	46.28	9.792	45.48	12.125	48.20	9.574	45.60	9.482
15. Homogeneity	10.40	3.136	11.76	2.127	11.84	2.718	11.20	1.979
16. Goal clarity	16.32	4.47	18.72	3.494	18.96	3.062	16.88	3.756
17. Cohesiveness	9.28	2.17	8.68	1.773	10.12	8.565	7.96	1.62
18. Open group process	10.64	2.797	10.72	3.221	9.72	3.921	13.16	5.21
19. Internal fragmentation	11.88	3.811	10.52	2.801	11.84	2.41	10.56	2.74
20. Locus of control	11.80	4.787	11.92	6.184	10.28	4.757	11.52	3.38
21. Job involvement	47.80	5.664	45.04	7.385	44.80	6.892	42.96	7.913

Table 4 shows the mean scores (X) and Standard deviations ( $\sigma$ ) of 100 male junior managers for the 4 ethnic groups on the 21 variables. Psychoticism in other male junior managers is 1.89, homogeneity in Yoruba male junior managers is 1.979, cohesiveness in Igbo and Yoruba male junior managers are 1.773 and 1.62 respectively. The results show that Hausa male junior managers are higher in psychoticism (5.36), more satisfied with their work (36.08), promotion (34.64), extrinsically more satisfied (21.72), more job involved (29.24), more internally fragmented (11.88) and more involved with their work (47.80) than the remaining three male junior managers. The Igbo male junior managers are higher in Neuroticism (10.24), more satisfied with their pay (31.92), supervision (39.04) with higher locus of control (11.92) than the others. The results further show that the other junior male managers are higher in extraversion/ introversion (14.08), more satisfied with co-workers (46.52), intrinsically (46.72) and generally satisfied (75.48), they identify more with their jobs (32.36), more loyal (48.20), with higher homogeneity (11.84), goal clarity (18.96) and more cohesive (10.12) than the remaining three other sets of male junior managers. Finally, Yoruba male junior managers are better in open group process (13.16) than the others. The scores are subjected to one-way analysis of variance to determine the level of differences that occur among the four categories of male junior employees. The results are presented in Table 5

**Table 5: Summary of One-Way Anova as Applied to 260 Male Junior Managers for the Ethnic Groups (Significant Effects Only)**

VARIABLES	SUM OF SQUARES	F
1. Promotion satisfaction	19066.56	3.845**
2. Co – worker satisfaction	15224.99	3.012*
3. Goal clarity	1699.56	3.095*
4. Open group process	1619.64	3.567*
5. Internal fragmentation	1084.00	2.646*

\*p < 0.05 critical = 2.60; \*\*p < 0.01 critical = 3.78

The results in Table 5 indicate that there are significant differences in five variables among male junior managers and among the 4 ethnic groups in five of the 21 variables.

Out of the five significant differences only one namely Promotion Satisfaction (3.845) is Significant at ( $F = 3.78$ ,  $df = 3/96$ ,  $p < 0.01$ ) and four are significant at ( $F=2.60$ ,  $df = 3/96$ ,  $p < 0.05$ ) They are co-workers satisfaction (3.012), goal clarity (3.095), open group process (3.567) and internal fragmentation (2.646). However, male junior managers did not significantly differ in psychoticism, extraversion/introversion, neuroticism, work satisfaction, pay satisfaction, supervision satisfaction, intrinsic, extrinsic and general satisfaction, identification, involvement and loyalty, homogeneity, cohesiveness, locus of control and job involvement. The results could not be said to support hypothesis 2 which states that junior male employees will differ significantly across ethnic groups in Nigerian organisations Scheffe test was also used to analyse the 5 significant F-ratios in Table 5 so as to determine the pairs of ethnic categories of male junior managers in which significant differences occur. The outcome of the analysis is shown in Table 6

**Table 6: Scheffe Test for Significant F - Ratios in Table 5**

Variables	Yoruba Vs Igbo	Yoruba Vs Hausa	Yoruba Vs Others	Igbo Vs Hausa	Igbo Vs Others	Hausa Vs Others
1. Promotion satisfaction	-8.00	-12.40*	-4.88	-4.40	3.12	7.52
2. Open group process	2.44	2.52	3.44*	0.080	1.00	0.92

The results in Table 6 indicate that Yoruba and Hausa differ in promotion satisfaction while Yoruba and others differ in open group process out of the 5 significant variables in Table 5. The results could not be said to support Hypothesis 2 because male junior managers do not significantly differ from each other among the 4 ethnic groups.

**Tables 7-9** are results for hypothesis 3. It gave the results for the descriptive statistics, Anova and Scheffe tests.

**Table 7: Comparison of 260 Female Senior Managers for the Ethnic Groups**

VARIABLES	65 (HSFM)		65 (ISFM)		65 (OSFM)		65 (YSFM)	
	X	$\sigma$	X	$\sigma$	X	$\sigma$	X	$\sigma$
1. Psychoticism	9.92	2.465	4.08	3.174	3.24	2.026	5.00	3.464
2. Extraversion/introversion	9.96	1.172	13.20	3.488	13.44	2.859	11.60	3.304
3. Neuroticism	10.96	2.791	11.12	4.54	10.48	2.74	10.68	4.888
4. Work satisfaction	31.88	8.487	38.64	10.519	38.08	6.695	36.40	10.344
5. Pay satisfaction	28.80	6.976	29.64	14.557	30.36	10.727	30.00	11.402
6. Promotion satisfaction	34.68	8.548	28.80	14.844	31.68	11.338	35.76	13.258
7. Supervision satisfaction	34.76	11.72	41.00	10.611	36.12	10.733	36.90	10.241
8. Co – worker satisfaction	38.08	10.981	45.84	11.194	41.28	9.507	41.88	15.538
9. Intrinsic satisfaction	37.64	4.415	48.28	6.181	41.28	6.202	44.36	7.023
10. Extrinsic satisfaction	19.56	6.501	20.24	4.841	30.32	3.614	20.32	4.922
11. General satisfaction	62.00	14.623	75.52	9.709	70.40	9.332	41.12	11.609
12. Identification	32.28	7.368	32.40	8.475	32.04	6.617	31.20	7.638
13. Involvement	28.48	2.725	28.96	5.327	24.92	4.212	28.72	5.913
14. Loyalty	40.32	5.266	47.20	11.726	44.80	6.795	48.48	7.816
15. Homogeneity	13.44	5.824	12.52	1.046	9.84	2.656	11.24	1.739
16. Goal clarity	16.72	3.103	19.36	3.29	14.48	3.49	16.64	4.906
17. Cohesiveness	11.00	2.415	7.76	0.926	7.84	1.344	8.08	1.115
18. Open group process	11.80	2.309	11.08	6.519	11.92	3.29	10.96	4.108
19. Internal fragmentation	10.12	2.369	11.88	2.027	10.68	1.626	10.40	3.329
20. Locus of control	15.56	3.254	10.84	4.607	14.44	2.599	12.68	4.525
21. Job involvement	52.68	10.754	43.44	5.767	47.88	7.293	45.52	5.818



Table 7 shows the mean scores ( $\bar{X}$ ) and Standard deviations ( $\sigma$ ) for 260 female senior managers for the 4 ethnic groups on the 21 variables. The results show that except homogeneity in Igbo and Yoruba Female Senior managers with 1.046 and 1.739 respectively, cohesiveness in Igbo, others and Yoruba female senior managers with 0.926, 1.344 and 1.115 respectively, internal fragmentation in other female senior managers with 1.636. The results show that Hausa female senior managers are higher in psychoticism (9.92), homogeneity (13.44), cohesiveness (11.00), locus of control (15.56), and job involvement (52.68) than Igbo, others and Yoruba female senior managers. However, the Igbo female senior managers are higher in neuroticism (11.12), more satisfied with work (38.64), supervision (41.00), co-workers (45.84), intrinsically (48.28) and generally (75.52) more satisfied, identify more (32.40) and more job involved (28.96), with higher goal clarity (19.36) and internal fragmentation (11.88) than Hausa, others and Yoruba counterparts. The results also show that others are higher in extraversion/introversion (13.44), more satisfied with pay (30.36), extrinsically more satisfied (30.32) with higher open group process (11.92) than Hausa, Igbo and Yoruba counterparts. Finally, the Yoruba female senior managers are more satisfied with their promotion (35.76) and show more loyalty (48.48) with their jobs than Hausa, Igbo and other counterparts. The results show that significant differences occur among senior female managers of the different ethnic groups. The scores are subjected to one-way analysis of variance to determine the level of differences that occur among the four categories of female senior managers. This is presented in Table 8

**Table 8: Summary of One –Way Anova as Applied to 260 Female Senior Managers for the Ethnic Groups (Significant Effects Only)**

VARIABLES	SUM OF SQUARE	F
1. Psychoticism	1963.39	27.596**
2. Extraversion/introversion	970.75	7.433**
3. Intrinsic satisfaction	6208.00	12.144**
4. General satisfaction	11794.59	5.736**
5. Involvement	2407.44	4.298**
6. Loyalty	7070.75	3.888**
7. Homogeneity	466.99	10.434**
8. Goal clarity	3051.39	4.042**
9. Cohesiveness	345.04	24.797**
10. Internal fragmentation	654.00	3.039*
11. Locus of control	1792.64	8.555**
12. Job involvement	5965.39	15.379**

\* $p < 0.05$  Critical = 2.60; \*\* $p < 0.01$  Critical 3.78

The results in Table 8 show that there are significant differences among female senior managers across the 4 ethnic groups in 12 of the 21 variables. Out of the 12 significant differences, 11 variables namely: psychoticism (27.596), extraversion/introversion (7.433), intrinsic satisfaction (12.144), general satisfaction (5.736), involvement (4.298), loyalty (3.888), homogeneity (10.434), goal clarity (4.042), cohesiveness (24.797), locus of control (8.555) and job involvement (15.379) are significant at ( $F=3.78$ ,  $df = 3/96$ ,  $p < 0.01$ ) and only internal fragmentation (3.039) was significant at ( $F=2.60$ ,  $df = 3/96$ ,  $p < 0.05$ ) However, the female senior managers did not differ significantly in neuroticism, work satisfaction, pay satisfaction, promotion satisfaction, co-worker satisfaction, extrinsic satisfaction, identification and open group process. The results are in support of Hypothesis 3 which states that senior female employees will differ significantly across ethnic groups in Nigerian organisations. Scheffe test was also used to analyse the 12 significant F-ratios in Table 8 so as to determine the pairs of ethnic categories of female senior managers in which significant differences occur. The outcome of the analysis is shown in Table 9

**Table 9: Scheffe Test for Significant F- Ratios in Table 8**

Variables	Yoruba vs Igbo	Yoruba vs Hausa	Yoruba vs others	Igbo vs Hausa	Igbo vs others	Hausa vs others
1. Psychoticism	0.92	-5.90*	1.76	-6.84*	0.84	7.68*
2. Extraversion /introversion	-1.52	1.56	-1.84	3.08*	-0.32	-3.40*
3. Intrinsic satisfaction	-2.64	8.16*	4.40	10.80*	7.04*	-3.76
4. General satisfaction	-4.64	7.24	0.72	11.88*	5.36	-6.52
5. Involvement	-0.24	-0.040	3.80*	0.20	4.04*	3.84*
6. Loyalty	1.16	7.28*	3.04	6.12	1.88	-4.24
7. Homogeneity	-1.24	-1.16	1.40	0.080	2.64*	2.56*
8. Goal clarity	-0.60	1.76	4.16	2.36	4.76*	2.40
9. Cohesiveness	0.20	-2.68*	0.24	-2.88*	0.040	2.92*
10. Locus of control	1.96	-3.24*	-1.76	-5.20*	-3.72*	1.48
11. Job involvement	-1.28	-11.36*	-4.04	-10.08*	-2.76	7.32*

The results in Table 9 indicate that the highest number of significant differences in the variables was found between Igbo and Hausa. They differ significantly in 7 out of the 12 variables. These variables are Psychoticism (-6.84), extraversion/introversion (3.08), intrinsic (10.80) and general satisfaction (11.88), cohesiveness (-2.88), locus of control (-5.20) and Job involvement (-10.08). The next pair of comparison was found between Yoruba and Hausa, Hausa and others. They differ significantly in 6 out of the 12 variables in each of the pair of groups. Yoruba and Hausa differ in psychoticism (-5.90), intrinsic satisfaction (8.16), loyalty (7.28), cohesiveness (-2.68), locus of control (-3.24) and job involvement (-11.36). Hausa and others differ in psychoticism (7.68), extraversion/introversion (-3.40), organisational commitment (involvement) (3.84), homogeneity (2.56), cohesiveness (2.92), and job involvement (7.32). Yoruba and others differ in only one of the variables which is organisational commitment (involvement) (3.80). Yoruba and Igbo did not differ at all in any of the variables. From the results, all the job characteristics and internal fragmentation did not significantly distinguish between any pair of the categories of employees. Moreover, no variable distinguish between all the pairs of groups. The results support Hypothesis 3 which states that senior female employees will differ significantly across ethnic groups in Nigerian organisations

**Tables 10-12** are results for hypothesis 4. It gave the results for the descriptive statistics, Anova and Scheffe tests.

**Table 10: Comparison of 260 Male Senior Managers for the Ethnic Groups**

VARIABLES	65 (HSMM)		65 (ISMM)		65 (OSMM)		65 (YSMM)	
	X	$\sigma$	X	$\sigma$	X	$\sigma$	X	$\sigma$
1. Psychoticism	7.08	3.818	3.32	1.749	3.48	2.023	3.68	2.155
2. Extraversion/introversion	11.68	3.051	11.92	3.968	12.76	3.897	13.60	3.416
3. Neuroticism	11.44	5.083	8.96	5.412	8.84	5.178	12.20	3.476
4. Work satisfaction	30.76	12.709	28.52	12.101	36.48	12.214	32.08	12.349
5. Pay satisfaction	27.00	10.432	27.84	16.492	32.40	11.372	19.68	17.613
6. Promotion satisfaction	32.48	10.186	27.20	14.248	34.88	10.997	27.44	17.335
7. Supervision satisfaction	36.20	10.735	35.96	12.924	40.52	8.963	39.44	11.225
8. Co – worker satisfaction	38.88	10.748	41.52	11.662	41.12	13.393	48.00	8.48
9. Intrinsic satisfaction	44.28	4.523	41.40	8.406	44.96	5.976	43.80	7.188
10. Extrinsic satisfaction	20.68	3.52	21.01	8.349	22.84	7.093	21.28	6.649
11. General satisfaction	71.92	9.768	70.32	11.313	72.68	9.223	72.68	9.072
12. Identification	34.20	5.416	30.16	9.664	31.20	5.958	30.64	9.622
13. Involvement	27.68	2.428	27.04	6.201	28.76	6.313	26.16	6.155
14. Loyalty	43.08	5.575	41.52	10.921	44.92	9.403	45.84	12.756
15. Homogeneity	12.08	2.272	10.92	2.629	11.24	1.943	11.68	1.842
16. Goal clarity	16.36	5.816	16.16	6.283	18.56	3.042	18.20	3.442
17. Cohesiveness	8.04	1.947	7.88	2.351	8.00	1.225	9.64	2.252
18. Open group process	12.36	3.807	11.96	5.466	12.40	4.822	11.36	5.131
19. Internal fragmentation	10.24	3.295	10.36	3.264	10.48	2.084	11.32	2.688
20. Locus of control	17.32	4.347	10.04	6.079	12.84	5.857	13.00	3.041
21. Job involvement	48.80	7.136	43.72	5.668	45.80	8.808	44.44	7.411

Table 10 shows the mean scores (M) and Standard deviations ( $\sigma$ ) of 260 male senior managers for the four ethnic groups on the 21 variables. The results show that except for psychoticism in Igbo male senior managers with 1.749, homogeneity in others and Yoruba male senior managers with 1.943 and 1.842 respectively, cohesiveness in Hausa and others with 1.972 and 1.225 respectively. The results further show that Hausa male senior managers are higher in psychoticism (7.08), identify more (34.20), more involved (27.68) with their jobs with higher homogeneity (12.08) and locus of control (17.32) than Igbo, others and Yoruba male senior managers. The results also show that others are more satisfied with work (36.48), pay (32.40), promotion (34.88), supervision (40.52), intrinsically (44.96), extrinsically (22.84) and generally (72.68) more satisfied (36.48), more involved (28.76) with higher goal clarity (18.56) and open group process (12.40) than Hausa, Igbo and Yoruba counterparts. Also, Yoruba male senior managers are higher in extraversion/introversion (13.60), neuroticism (12.20), more satisfied with co-workers (48.00), more cohesive (9.64), higher internal fragmentation (11.32), generally more satisfied (72.68) and more loyal (45.84) with their jobs than Hausa, Igbo, and other counterparts. Lastly, Igbo male senior managers did not show any affinity with any of the 21 variables. The results show that significant differences occur among senior male managers of the different ethnic groups. The scores are further subjected to one-way analysis of variance to determine the level of differences that occur among the four categories of male senior managers

**Table 11: Summary of One –Way Anova as Applied To 260 Male Senior Managers for the Ethnic Groups (Significant Effects Only)**

VARIABLES	SUM OF SQUARES	F
1.Psychoticism	803.56	9.040**
2.Neuroticism	2477.04	3.128*
3. Work satisfaction	15474.91	1.838*
4. Co-worker satisfaction	13535.36	3.206*
5. Cohesiveness	433.79	4.399**
6. Locus of control	3228.00	8.640**
7. Job involvement	6963.79	2.601*

\*p < 0.05 Critical = 2.60; \*\*p < 0.01 Critical = 3.78

The results in Table 11 show that there are significant differences among male senior managers across the 4 ethnic groups in 7 out of 21 variables. Out of the 7 significant differences, 3 variables namely, psychoticism (9.040), cohesiveness (4.399) and locus of control (8.640) are significant at  $p < 0.01$ . Four variables are significant at  $P < 0.05$ . They are neuroticism (3.128), work satisfaction (1.838), co-worker satisfaction (3.206), and job involvement (2.601). The results partially support hypothesis 2 which states that senior male employees will differ significantly across the ethnic groups in Nigerian organisations. Scheffe test was also used to analyse the 7 significant F- ratios in Table 11 so as to determine the pair of ethnic categories of male senior managers in which significant differences occur. The outcome of the analysis is shown in Table 12

**Table 12: Scheffe Test for Significant F-Ratios in Table 11**

Variables	Yoruba vs Igbo	Yoruba vs Hausa	Yoruba vs others	Igbo vs Hausa	Igbo vs others	Hausa vs others
1 Psychoticism	0.00	-3.00*	0.20	-3.00*	0.20	3.20*
2.Co-workers	7.68	9.12*	6.88	1.44	-0.80	-2.24
3 Cohesiveness	1.76*	1.60	1.64*	-0.16	-0.12	0.040
4 Locus of control	2.56	-4.72*	-0.24	-7.28*	-2.80	4.48*

The results in Table 12 show that the highest number of significant differences in the variables was found between Yoruba and Hausa. They differ significantly in 3 out of the 7 variables. These variables are psychoticism (-3.00), co-worker satisfaction (9.12) and locus of control (-4.72). The next pair of comparison was found between Igbo and Hausa, Hausa and others. Igbo and Hausa differ in psychoticism (-3.00) and locus of control (-7.28). Hausa and others differ in psychoticism (3.20) and locus of control (4.48). Yoruba and Igbo differ in only cohesiveness (1.76). Igbo and other did not differ in any of the variables.

The results partially supported hypothesis 4 which states that senior male employees will differ significantly across ethnic groups in Nigerian organisations. In general, considering the results obtained in Tables 1-12, apart from male junior and senior employees there are significant differences between employees of the same gender, job cadre across the 3 main ethnic groups and minorities in Nigerian organisations.

### **Discussion and Recommendation**

The research went about finding out if employees of the same gender/ work cadre are significantly different across the different ethnic groups in Nigerian organisations. The study showed the computed means and the standard deviations of the 260 female and 260 male participants on the 21 variables as indicated in Table 1. One-way Anova and Scheffe tests were used to analyse the data as shown in Table 1-12. Tables 1-3 showed that junior female employees differ significantly across the ethnic groups. Tables 4-6 showed that hypothesis that says that junior male employees will differ significantly across ethnic groups was not supported. Tables 7- 9 showed that female senior managers differ significantly across ethnic groups in Nigerian organisations. Lastly, the results in Tables 10-12 showed that the hypothesis that says male senior employees will differ significantly across the ethnic groups is partially supported. Managers, supervisors and stakeholders should make use of the findings of this research. They should note that both junior and senior female employees differ significantly across ethnic groups in Nigerian organisations. Male junior and senior employees are not different in most of the variables under consideration across ethnic groups in Nigerian organisations.

### **References**

- Akintayo, O. A (2009). Psychosocial and ethnic factors as determinants of organisational behaviour of workers in the oil refineries in Nigeria. Unpublished PhD Thesis, University of Lagos.
- Akintayo, O. A (2013a). Personality characteristics on Organisational Commitment, Job involvement and Job satisfaction. *International Journal of Socio-economic Development and Strategic Studies*. Vol 6, No 1 September. Pp 14 – 31.
- Akintayo, O.A (2013b). Job characteristics as determinants of organisational behaviour. *Management Skills and Techniques*. Vol 4, No 1 April 2013. Pp 126 – 146.
- Akintayo, O. A. (2014). The influence of work groups on organisational Commitment, Job Involvement and Job Satisfaction of Nigerian workers. *Journal of Technology, Entrepreneurship & Rural Development* Vol 5, No. 1 September. Pp 91-106