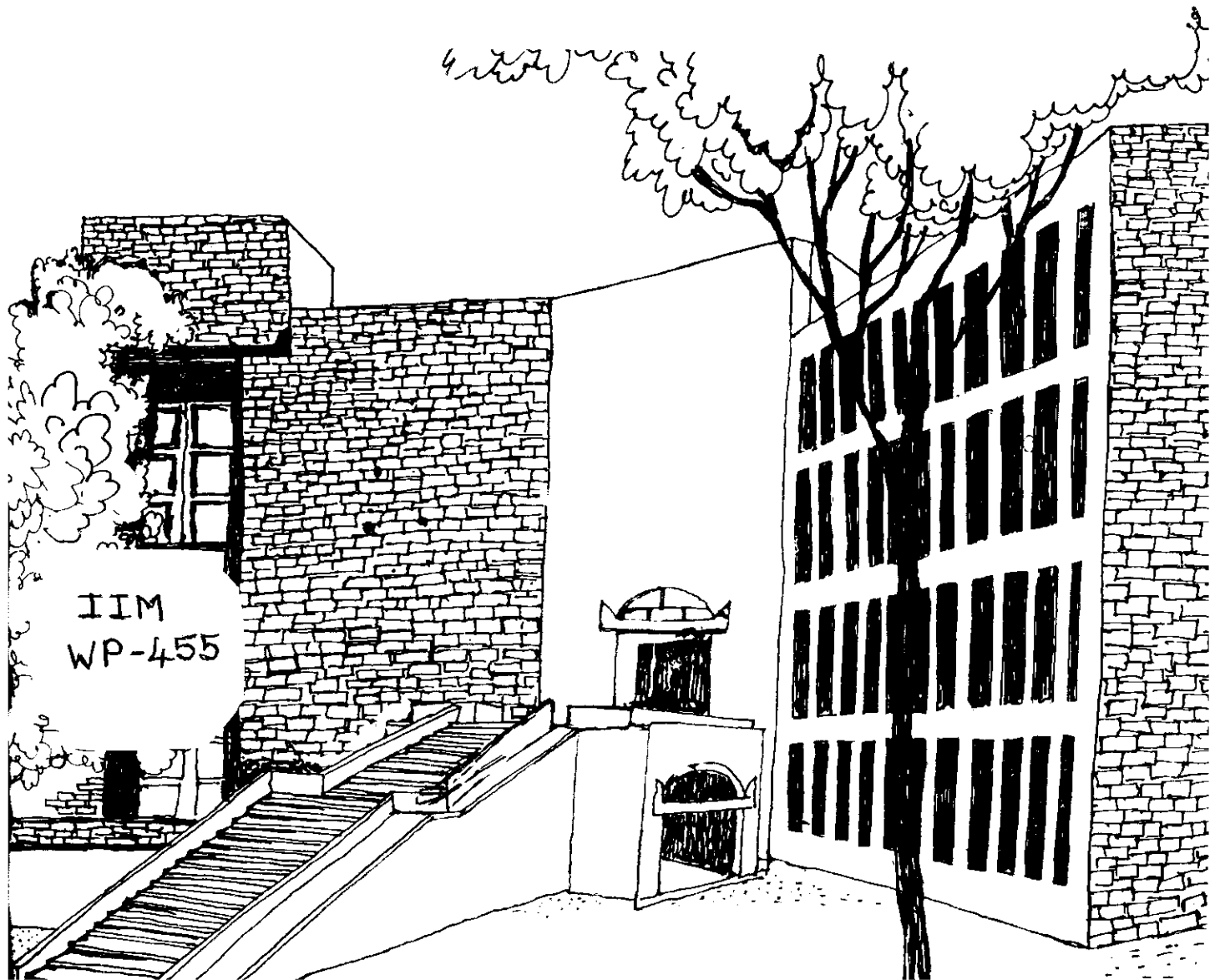




W. P. 455

Working Paper



PERSONAL CHARACTERISTICS AND JOB
SATISFACTION--INDIA--NIGERIA
COMPARISON

By

Mirza S. Saiyadain

W P No. 455

April 1983

1983
(455)

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage.

INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD-380015
INDIA

Research on the personal characteristics of the employees suggests that the bio-social variables contribute in varied and complex ways to the attitudes they have towards their jobs. Satisfied employees have been found to be different from dissatisfied employees in such respects as age, sex, marital status, years of education and experience etc. As work is one of the necessary aspects of the total life experience of an individual, it becomes important to examine the role that personal characteristics play in his job satisfaction. This is a comparative study of the relationships between job satisfaction and personal characteristics on samples from India and Nigeria.

SURVEY OF THE LITERATURE

While there are no published studies on the Nigerian samples, a survey of studies on Indian samples and those in the West suggests varied relationships between the bio-social variables and job satisfaction. In this survey, an attempt is made to examine the relationship between age, sex, marital status, number of dependents, years of education and experience, and annual income with job satisfaction.

Age

As far as age is concerned, most studies in the West have found a positive relationship between age and satisfaction,

* This project was funded under the seed money grant, IIMA.

(e.g., Bernberg, 1954; McDonald & Gunderson, 1974; Glenn, et. al., 1977). In a longitudinal study, Hoppock (1960) compared the satisfaction level of 27 employees in 1932, and again in 1959 (after 27 years). His results showed that of 20 cases, for 17, the level of satisfaction increased. However, two persons showed a decline in their level of satisfaction.

A closer analysis of the results of these studies reveals that the relationship is not as much one-to-one as it has been pointed out to be. The results show that satisfaction is high among young employees; it tends to go down during the first few years of employment, after which satisfaction increases with increasing age indicating a U-shape curve. Benge and Copell (1947) found that those under 20 years had high morale, that the lowest level of morale occurred between 20-29 and that after 30 morale went up with increasing age. This trend was found to be independent of the employee's length of service (Bernberg, 1954).

A slight modification of U-shape relationship was observed by Saleh and Otis (1964). They observed that the satisfaction level increased with increasing age upto 59 years and then declined just before retirement time suggesting a negative skewed curve. The decline in satisfaction during the pre-retirement period was explained by the blockage of channels for self-actualization and psychological growth and was related to the decline in physical health.

As far as age and its relationship with satisfaction for Indian samples is concerned, the findings seem to be little different from those in the West. Majority of studies do not show any significant relationship between age and job satisfaction suggesting that perhaps job satisfaction is independent of age (e.g., Natraj and Hafeez, 1965; Sinha & Nair, 1965; Ghosh & Shukla, 1967; Rao, 1970; Vasudeva & Rajbir, 1976; Reddy & Ravikumar, 1980). A few studies show that satisfaction increases with increasing age (Guha, 1965; Sinha & Agarwala, 1971; Pathak, 1977; Sharma & Sharma, 1978). There is at least one study that shows negative correlation between age and job satisfaction (Sinha & Sarma, 1962).

Sex

Differences in the satisfaction of male and female employees are of growing importance because of the increasing number of women taking jobs and the changing role and status of the women in society. Some studies in the West have found no difference in the satisfaction level of the two (Centers & Bugental, 1966), while others have found women to be less satisfied than men (Cole, 1940). However, bulk of the evidence indicates women to be more satisfied with their jobs than men (Habbe, 1947; Stockford & Kunze, 1950). In a recent study where respondents identified their degree of satisfaction with one of the 11 faces (ranging from broad smile to deep scowl) female employees were found to be significantly more satisfied than male employees

(Dunham & Herman, 1975). The sex of the faces used had no significant effect and there was no interaction between the sex of the respondents and the sex of the faces.

In industrial sector in India, there does not seem to be any published research that has compared the level of job satisfaction of male and female employees. There may be several reasons for this (a) not many women are employed in industrial sector, (b) male population has easily been accessible for data collection, and (c) focus has been more on variables other than sex. There are, however, studies that have compared the degree of satisfaction of female samples across professions (Rani, 1976; Gupta, 1979), and level of income and education (Rani, 1976). Unmarried female teachers have been found to be more satisfied than married female teachers (Reddy & Balyan, 1981).

Marital Status

Though a few studies in the West show that married employees are more satisfied than unmarried (Inlow, 1951; McDonald & Gunderson, 1974), most literature reports, no significant differences in the job satisfaction of married and single employees (Cole, 1940; Jurgenson, 1947; Ash, 1954).

In the Indian context, most studies show no relationship between marital status and job satisfaction (Sinha & Nair, 1965; Ghosh & Shukla, 1967; Sinha & Agarwala, 1971). There are, however, two exceptions -- one where a study by Sinha and Sarma

(1962) shows that married employees are more satisfied and the other by Rao (1970) which indicates that single employees are more satisfied.

Number of dependents

The relationship between job satisfaction and number of dependents in the samples from the West is inconclusive. In a study, Ley (1966) found no significant variation in the number of dependents of those who stayed with the company and those who left. Salina's (1964) study clearly showed no correlation between financial satisfaction and number of dependents.

Studies dealing with the Indian samples indicate no relationship between number of dependents and job satisfaction (Sinha & Sarma, 1962); Ghosh & Shukla, 1967; Sinha & Agarwala, 1971; Vasudeva & Rajbir, 1976; Pathak, 1977; Reddy & Ravikumar, 1980).

Years of Education

Despite some support to the general notion that increase in education negatively correlates with job satisfaction for Western samples (Centers & Cantril, 1946; Neilson, 1951; McDonald & Gunderson, 1974), there is evidence of no relationship (Ash, 1954; Ley, 1966) and positive relationship (Kessler, 1954). It is generally accepted that well educated employees feel more frustrated in routine jobs.

Most studies on Indian samples show no relationship between education and job satisfaction (Sinha & Sarma, 1962; Nataraj & Hafeez, 1965; Sinha & Nair, 1965; Ghosh & Shukla, 1967; Vasudeva Rajbir, 1976). In a more detailed study looking at the technically qualified people alone Sharma & Sharma (1978) compared the satisfaction level of graduate engineers with diploma holders and found no significant difference. Studies by Rao (1970) and Sinha & Agarwal (1971) suggest positive and negative relationships respectively between level of education and level of satisfaction. When hierarchical levels were controlled, Pathak (1977) found significant positive relationship between education and level of job satisfaction among the lower hierarchy employees. However, no relationship was found among the upper hierarchy employees.

Years of Experience

Length of service like age, shows a U-shape relationship between years of experience and job satisfaction for samples from the West (McDonald & Gunderson, 1974). The degree of satisfaction with number of years of experience goes down if employee feels that he is working on dead-end job. However, if the employee stays on the job satisfaction seems to increase with years (Hull & Kolstad, 1942).

Unlike their Western counterparts, employees in India show variation in the relationship between years of experience and

job satisfaction. There seems to be more evidence in favour of no relationship (Natraj & Hafeez, 1965; Ghosh & Shukla, 1967; Rao, 1970; Sinha & Agarwala, 1971). Two studies show a positive relationship (Sinha & Nair, 1965; Reddy & Ravikumar, 1980), while at least one study shows negative relationship (Vasudeva & Rajbir, 1976). Sharma and Sharma (1978) suggest that the first five years in service do not make a difference in satisfaction level when compared to the next five years. However, when those below five years of experience are compared with those above ten years, the latter are found to be significantly more satisfied.

Income

Though the relationship between job satisfaction and income is complex, generally the literature on Western samples supports the notion that satisfaction increases with increasing income (Centers & Cantril, 1946; McDonald & Gunderson, 1974). On the other hand, Ley (1966) found his turn over group to have higher income than the steady group. What seems to determine the relationship between the two is the employees' perception of whether the pay rate is fair or not rather than the actual amount of money earned (Survey Research Center, 1950).

Given the accepted significance of money in Indian context, one would expect more studies indicating higher job satisfaction with increasing income. However, only two studies (Vasudeva &

Rajbir, 1976; Sharma, 1980) indicate such a relationship. Bulk of the evidence suggests no relationship between income and satisfaction (Sinha & Sarma, 1962; Natraj & Hafeez, 1965; Sinha & Nair, 1965; Ghosh & Shukla, 1967; Rao, 1970; Sinha & Agarwala, 1971). Other studies have found that the relationship between income and satisfaction is mediated through the hierarchical levels (Pathak, 1977) and skill level (Vasudeva & Rajbir, 1976). Lower level employees and skilled workers when compared to higher level employees and semi-skilled workers respectively showed an increase in satisfaction with increasing wages. No relationship was found in the other two groups.

METHOD AND PROCEDURE

Sample

Data were collected on 778 Indian and 620 Nigerian* employees representing teaching and research institutions, commercial banks, engineering and manufacturing organizations, health services, transport and trading industries. The sample represented both the private and public sectors of the two countries.

Personal Characteristics

Information on seven personal characteristics (age, sex, marital status, number of dependents, years of education, years of work experience, and annual income) was sought. The

* Data on Nigerian employees were collected by the author during 1977-79 when he was on a visiting assignment to Nigeria.

choice of characteristics was dictated by the following considerations:

1. They have been thoroughly explored in the West and data for comparative purposes are available.
2. For majority of the employees these are of vital concern. They figure as topics of discussion, debate and negotiations between the employees and the employers.
3. They are easily identifiable and can easily be measured.

Job Satisfaction

A distinction has to be made between the overall job satisfaction and the satisfaction with the particular aspects of one's job. Since satisfaction with one facet of the job may be difficult to isolate because of the complex ways in which it might be intercorrelated with other facets of the job, an overall measure of satisfaction may provide more reliable data. In a study Wanous and Lawler (1972) found that 23 operational definitions based on 23 facets of job satisfaction did not yield empirically comparable measures of satisfaction. Some correlated better with the overall rating of job satisfaction than the others.

In this study overall rating of job satisfaction was used. It was operationalised in terms of the responses on the following three statements. The responses were recorded on a 6-point scale ranging from strongly agree to strongly disagree.

1. I am satisfied with my job.
2. I love to come to my job every day.
3. All things being equal, I will choose my present job again.

These items constitute a direct question approach which has been found to reveal significant differences among employees varying in many respects (Blauner, 1960). The relatively smaller number of the statements save both the respondents' time and the researchers' efforts in compiling. Yet they generate the same kind of data that a lengthy instrument does.

The inter item association among these statements was found to be statistically significant beyond conventional levels of significance. The coefficient values are given below:

Statements 1 and 2 $r = .241$; $N = 1398$

Statements 1 and 3 $r = .463$; $N = 1398$

Statements 2 and 3 $r = .502$; $N = 1398$

Since the three statements intercorrelate significantly, responses on them were added to get an overall score of job satisfaction.

RESULTS

Table 1 presents the means and standard deviation estimates of the 7 personal characteristics by cells. Number of cases in each cell are also indicated. The results of the relationship of job satisfaction and personal characteristics across the samples are presented individually.

Table 1

Means And Standard Deviation Estimates

Characteristics	INDIAN			NIGERIA		
	N	\bar{X}	SD	N	\bar{X}	SD
A. Age						
1. 25 and below	39	13.9	3.0	221	12.4	3.8
2. 26 - 30 years	111	14.3	2.6	171	12.6	3.6
3. 31 - 35 years	160	14.9	2.4	128	13.5	3.1
4. 36 - 40 years	178	14.9	2.6	46	13.9	3.4
5. 41 - 45 years	141	15.0	2.7	24	13.3	3.2
6. 46 - 50 years	78	14.6	2.5	18	14.6	4.0
7. Above 50 years	69	14.6	3.5	12	15.2	3.5
B. Sex						
1. Male	712	14.8	2.7	523	12.9	3.6
2. Female	66	14.2	2.8	95	13.2	3.6
C. Marital Status						
1. Married	685	14.8	2.7	339	13.5	3.5
2. Single	87	13.9	2.9	219	12.1	3.5
D. Dependents						
1. None	98	14.0	2.9	257	12.1	3.8
2. One	132	14.4	2.9	63	13.9	3.3
3. Two	147	14.7	2.4	99	13.3	3.8
4. Three	187	15.0	2.5	70	13.1	2.9
5. Four	146	14.9	2.8	59	13.6	3.2
6. Five	29	14.6	3.1	30	13.7	3.1
7. Six or more	39	15.7	2.2	42	13.9	3.9

Table 1 (Contd...)

Characteristics	INDIAN			NIGERIA		
	N	\bar{X}	SD	N	\bar{X}	SD
E. Education						
1. Secondary School	21	15.6	2.2	147	13.8	3.6
2. Higher Secondary School	49	15.2	3.0	181	13.5	3.4
3. Bachelor's degree	334	14.8	2.6	128	12.6	3.4
4. Master's degree	291	14.5	2.6	87	11.6	3.4
5. Ph.D. degree	76	14.4	3.0	75	12.4	3.7
F. Experience						
1. Below 5 years	80	13.8	2.9	256	12.2	3.6
2. 5 - 9 years	118	14.8	2.4	162	13.3	3.4
3. 10-14 years	185	14.6	2.6	101	13.7	3.1
4. 15-19 years	161	15.1	2.6	50	13.7	3.6
5. 20-24 years	118	14.8	2.7	28	13.9	3.9
6. 25 and above.	111	14.7	3.0	19	14.2	3.8
G. Annual Income						
1. Income one*	86	14.6	2.7	83	12.9	3.4
2. Income two	182	14.7	2.9	241	13.1	3.6
3. Income three	174	14.7	2.6	116	13.0	3.6
4. Income four	154	14.5	2.9	79	12.8	3.6
5. Income five	90	14.7	2.3	43	12.1	3.7
6. Income six	50	15.1	2.1	22	13.5	2.6
7. Income seven	38	15.2	2.6	32	13.3	3.6

* Income intervals for Indian sample are (Rs.) below 15000; 15000-22900; 23000-30900; 31000-38900; 39000-46900; 47000-54900; 55000 and above

Income intervals for Nigerian sample are (Naira) below 1000; 1000-1900; 2000-2900; 3000-3900; 4000-4900; 5000-5900; 6000 and above.

Age

An examination of the averages of satisfaction scores under various cells for the two samples suggests that there might be variations in the job satisfaction for various cells and samples. In order to ascertain the significance of differences, two-way analysis of variance with unequal cells (see Winer, 1962) was calculated. The results are presented in Table 2.

Table 2
Analysis of Variance
(Age)

Source	SS	df	MS	F
Country (C)	154.20	1	154.20	.75
Age (A)	215.68	6	35.95	.17
C x A	2.39	6	.39	.00
Within	282396.00	1382	204.34	-
Total	282768.27	.1395		

The analysis of variance results suggest that neither the country nor variations in age influence the job satisfaction scores. The specific comparisons using Newman-Keuls procedure (see Winer, 1962) on age variations within the country did not show any significant differences. The

highest average satisfaction ($\bar{X} = 15.0$) of age range 41-45 years on Indian sample did not vary significantly from the lowest average satisfaction ($\bar{X} = 13.9$) of age range of 25 years and below ($Q = 1.04$). Similarly, the highest average satisfaction ($\bar{X} = 15.2$) of the age range of 50 and above among the Nigerian sample showed no significant difference when compared to the lowest average satisfaction ($\bar{X} = 12.4$) of the age range of 25 years and below ($Q = 3.01$).

The averages of satisfaction scores of the two samples are plotted in Figure 1. An examination of the averages of satisfaction scores of Indian and Nigerian sample in Figure 1 suggests differences in trends. While the averages in case of Indian sample increase with increasing age upto the 41-45 years of age range after which increase in age seems to bring about decrease in satisfaction, in case of Nigerian sample, there seems to be a positive relationship between age and job satisfaction scores.

In order to statistically test the trends, separate trend analyses of Indian and Nigerian samples were calculated. Table 3 presents the trend analysis for Indian sample.

The results of trend analysis suggest that as far as job satisfaction of Indian employees is concerned, it increases with increasing age upto a point and then decreases with increasing age showing a curvilinear relationship between age and satisfaction ($F = 5.27$; $df = 1/769$; $P < .05$).

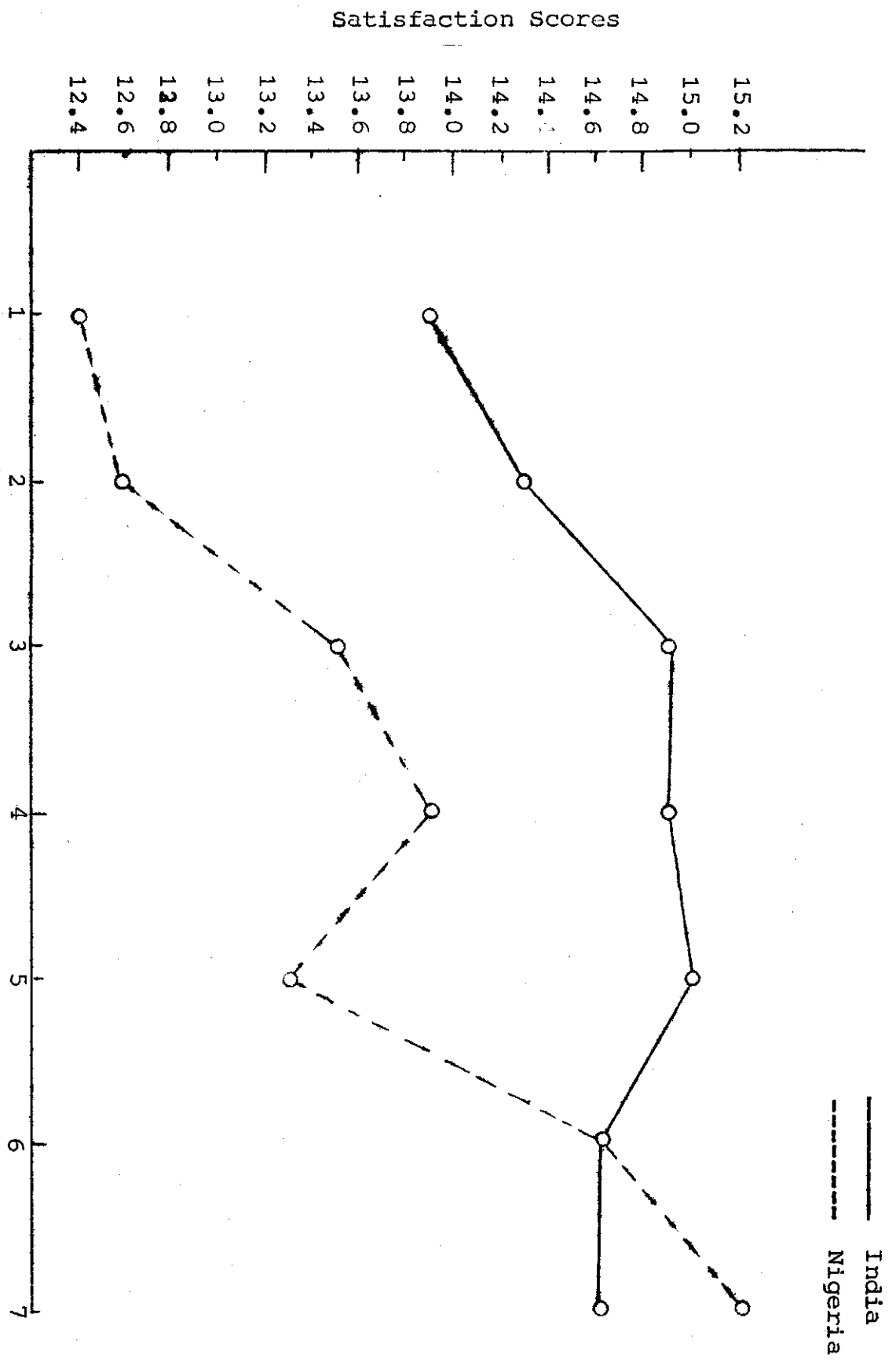


Figure - 1: Mean Satisfaction Scores (Age)
Note:- For explanations of numericals on horizontal line, see Table 1.

Table 3
Trend Analysis
Age (India)

Source	SS	df	MS	F
Between	60.27	6	-	-
Linear	16.98	1	16.98	2.35
Quadratic	38.11	1	38.11	5.27*
Other	5.18	4	1.29	.18
Error	5559.43	769	7.23	-

*P < .05

The trend analysis for Nigerian sample is presented in Table 4. The analysis indicates that the satisfaction with job of Nigerian employees increases with increasing age showing a significant linear relationship between age and satisfaction ($F = 10.63$; $df = 1/613$; $P < .01$).

Table 4
Trend Analysis
Age (Nigeria)

Source	SS	df	MS	F
Between	280.89	6	-	-
Linear	137.08	1	137.08	10.63**
Quadratic	1.34	1	1.34	.10
Other	142.47	4	35.62	2.76
Error	7904.27	613	12.89	-

** P < .01

Sex

The averages of satisfaction scores by sex and country are presented in Table 5 below:

Table 5
Average Satisfaction Scores

Sex	Country	
	India	Nigeria
Male	14.8	12.9
Female	14.2	13.2

As far as the sex differences within country are concerned, the t-statistics shows that male and female from India and Nigeria do not differ in their job satisfaction score. The t-values turn out to be .317 and .204 for India and Nigeria respectively. When sex variable was compared across countries it was found that the Indian males ($\bar{X} = 14.8$) experience significantly more job satisfaction than their counterparts in Nigeria ($\bar{X} = 12.9$). The value of t turns out to be 2.42 which is significant at .05 level for $N = 1235$. No such variation was found for females across the two countries ($t = .502$; $N = 161$).

Marital Status

The average job satisfaction scores of the respondents according to country and marital status were calculated.

These averages are presented in Table 6.

Table 6
Average Satisfaction Scores

Marital Status	Country	
	India	Nigeria
Married	14.8	13.5
Single	13.9	12.1

As far as within country marital status differences in job satisfaction are concerned, they do not seem to be statistically significant. The averages of job satisfaction between married and single in India are not statistically apart from each other ($t = .548$; $N = 772$). Same is the case with Nigerian sample ($t = 1.25$; $N = 618$). A subsequent analysis of married and single across the countries suggests that neither married people of the two countries nor the samples of singles from the two countries show significant variation in their satisfaction scores. The t-values for married and single turn out to 1.40 and .654 respectively.

Number of Dependents

Two way analysis of variance is presented in Table 7.

Table 7

Analysis of Variance
(Number of Dependents)

Source	SS	df	MS	F
Country (C)	437.32	1	437.32	2.15
Dependents (D)	211.29	6	35.21	.17
C x D	704.85	6	117.47	.58
Within	281752.27	1384	203.57	-
Total	283105.75	1397	-	-

The analysis shows that the average satisfaction scores show no significant variation either across the country or among the various cells of the number of dependents. The specific comparisons of the highest and lowest averages within countries were planned. For Indian data the highest average is for those who have 6 or more dependents ($\bar{X} = 15.7$). When this average was individually compared with the lowest average ($\bar{X} = 14.0$) of those Indians without dependents, the test revealed no significant variation ($Q = 1.39$). Similarly, when the highest average ($\bar{X} = 13.9$) of Nigerians with one dependent vis-a-vis the lowest average ($\bar{X} = 12.1$) of those without dependents were compared the value turned out to be insignificant ($Q = 2.25$). Additionally, for Nigerian sample another equally highest average ($\bar{X} = 13.9$) of those with more than 6 dependents was also compared to the lowest average of sample without dependents

the value was found to be insignificant ($F = 2.19$).

In order to see if the satisfaction averages of Indian sample by cells show any significant trend, analysis of the trends was carried out. This analysis is presented in Table 8.

Table 8

Trend Analysis

Number of Dependents (India)

Source	SS	df	MS	F
Between	123.47	6	-	-
Linear	64.59	1	64.59	9.03**
Quadratic	.02	1	.02	-
Other	58.64	4	14.66	2.05
Error	5510.13	770	7.16	-

** $P < .01$

The results of the trend analysis of the averages of satisfaction scores of Indian samples suggests that the satisfaction increases with increasing number of dependents ($F = 9.03$; $df = 1/770$; $P < .01$).

Trend analysis for the Nigerian sample is presented in Table 9. The analysis shows that the job satisfaction of Nigerian employees increases with increasing number of dependents ($F = 4.56$; $df = 1/614$; $P < .05$). However, the results

Table 9

Trend Analysis

Number of Dependents (Nigeria)

Source	SS	df	MS	F
Between	503.45	6	-	-
Linear	58.39	1	58.39	4.56*
Quadratic	3.80	1	3.80	.29
Other	441.26	4	110.32	8.63**
Error	7848.68	614	12.78	-

* $P < .05$; ** $P < .01$

show a stronger possibility of other trends as well ($F = 8.63$; $df 4/614$; $P < .01$). Observation of the means suggests that if we drop on first level (No dependents) the satisfaction score is high for those with only one dependent or more than six dependents showing a U-shape curve. The averages of both Indian and Nigerian samples are plotted in Figure 2.

Years of Education

A two-way analysis of variance with unequal cells was calculated to test the effect of country and years of education on the level of job satisfaction. Table 10 presents the results of analysis of variance test.

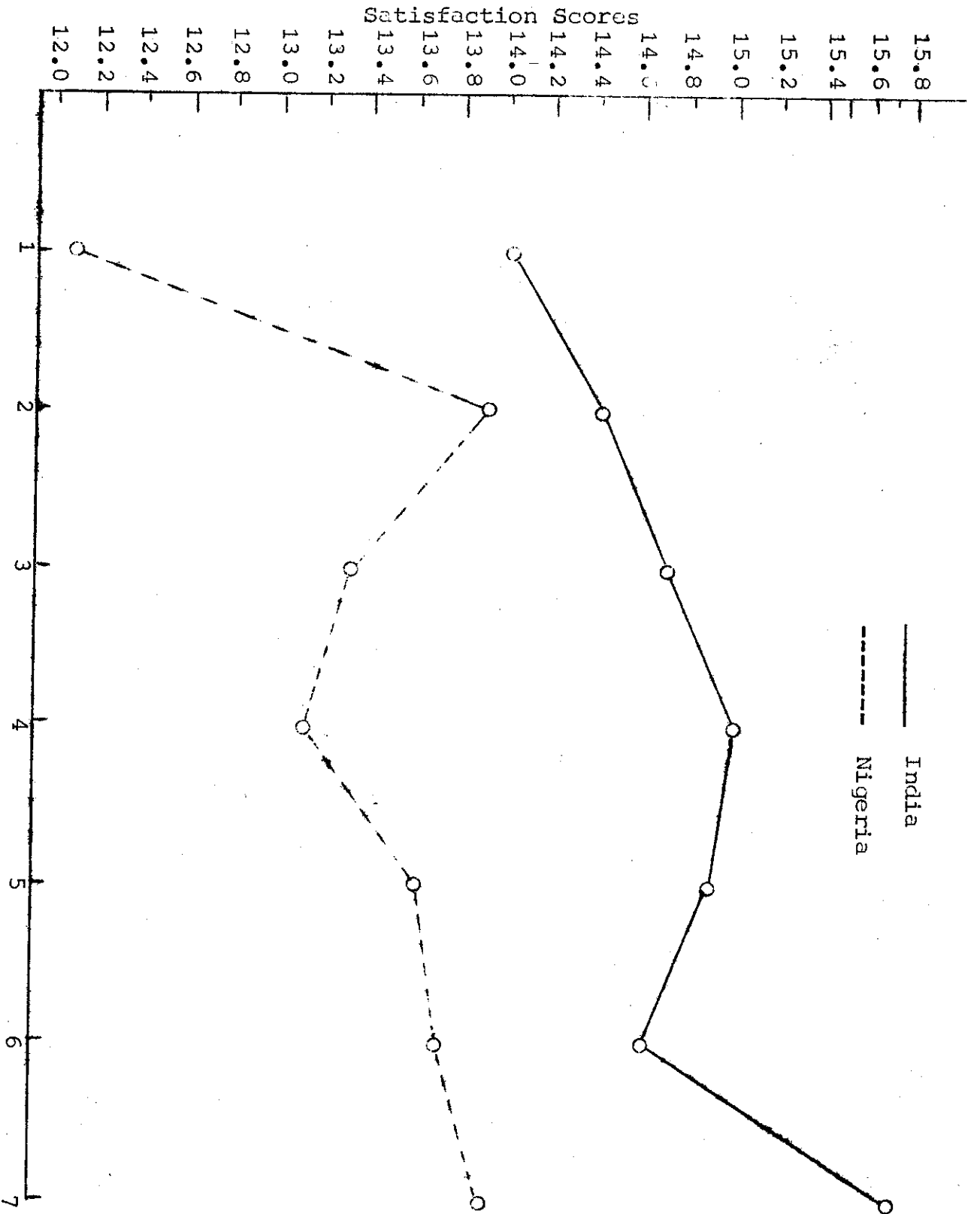


Figure - 2: Mean Satisfaction Scores (Number of Dependents)

Table 10

Analysis of Variance
(years of education)

Source	SS	df	MS	F
Country (C)	850.69	1	850.69	4.19*
Education (E)	268.82	4	67.20	.33
C x E	1155.66	4	288.91	1.42
Within	279835.02	1379	202.92	-
Total	282110.20	1388	--	-

* $P < .05$

The results of the analysis of variance indicate significant variations between countries. It seems that Indian sample is more satisfied than their Nigerian counterparts. In order to ascertain that there are no differences among the various cells within country, the planned comparisons were made. The highest average of satisfaction scores ($\bar{X} = 15.6$) of Indians with secondary school education was compared with the lowest average ($\bar{X} = 14.4$) of those with Ph.D. degree. The value was not found to be significant ($Q = .83$). Similarly, the highest average score ($\bar{X} = 13.8$) of Nigerians with secondary school education when compared with lowest average score ($\bar{X} = 11.6$) of those with master's level education, the value was not found to be significant ($Q = 2.36$).

The averages of job satisfaction scores of the samples from two countries are presented in Figure 3. An examination of these suggests that the satisfaction seems to decrease with increasing education. Trend analyses were calculated to test the trends. Table 11 presents the trend data for Indian sample.

Table 11
Trend Analysis
Years of Education (India)

Source	SS	df	MS	F
Between	46.97	4	11.74	-
Linear	36.01	1	36.01	5.04*
Quadratic	1.76	1	1.76	.25
Other	9.20	2	4.60	.64
Error	5545.63	776	7.15	-

* $P < .05$

The results of trend analysis suggest that as far as Indian sample is concerned the satisfaction score decreases with increasing education ($F = 5.04$; $df = 1/776$; $P < .05$) showing a significant negative relation between education and job satisfaction. Same kind of analysis was done for sample from Nigeria. trend analysis is presented in Table 12.

Satisfaction Scores

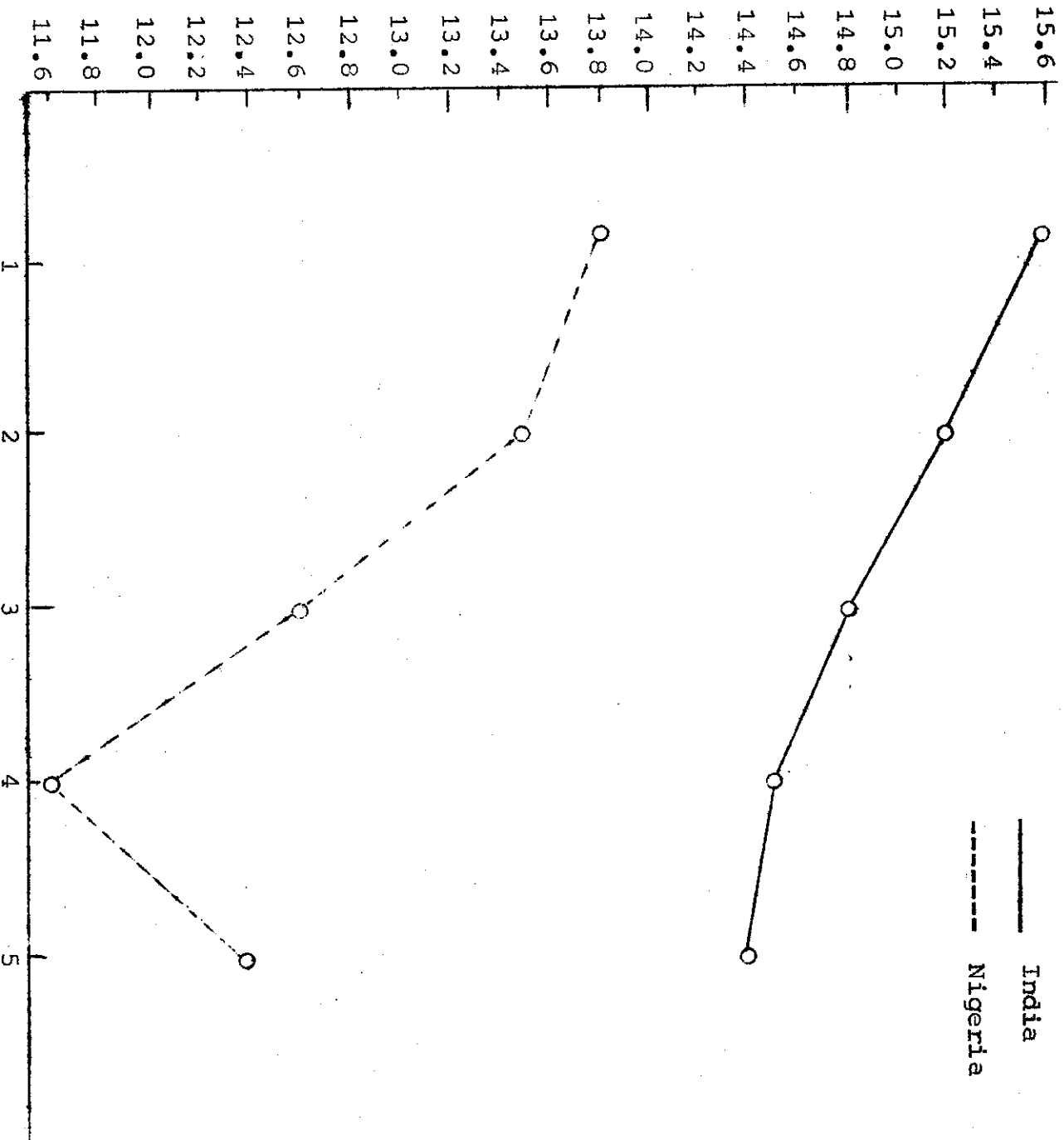


Figure - 3 : Mean Satisfaction Scores (Years of Education)

Note:- For explanations of numericals on horizontal line, See Table 1

Table 12
Trend Analysis
Years of Education (Nigeria)

Source	SS	df	MS	F
Between	349.14	4	-	-
Linear	226.33	1	226.33	18.51**
Quadratic	34.24	1	34.24	2.79
Other	88.57	2	44.28	3.62*
Error	7500.45	613	12.23	-

* $P < .05$; ** $P < .01$

The results indicate a very strong linear relationship ($F = 18.51$; $df = 1/613$; $P < .01$) between years of education and job satisfaction indicating that satisfaction decreases with increasing education. They also suggest the possibility of significant other trend ($F = 3.62$; $df = 2/613$; $P < .05$) indicating that the satisfaction decreases with increasing education upto a point beyond which increase in education brings about increase in satisfaction showing a U-shape curve. However, the linear possibility seems to be relatively more stronger than the other.

Years of Experience

The nature of relationship between years of experience and satisfaction across countries was estimated by using the 2-way analysis of variance. The results are presented in Table 13.

Table 13
Analysis of Variance
(years of experience)

Source	SS	df	MS	F
Country (C)	267.64	1	267.64	1.31
Experience (E)	211.43	5	42.28	.21
C x E	511.82	5	102.36	.50
Within	280965.91	1377	204.04	-
Total	281956.80	1388	-	-

The results in Table 13 indicate that neither the country nor the various years of experience singly or in interaction with each other make any significant variation in the satisfaction score of the samples. Individual comparison of the highest average satisfaction scores ($\bar{X} = 15.1$) within Indian sample with the lowest average satisfaction score ($\bar{X} = 13.8$) showed no significant difference ($Q = 1.41$). Similarly, the individual comparison of the highest average satisfaction score ($\bar{X} = 14.2$) within the Nigerian sample with the lowest average satisfaction score ($\bar{X} = 12.2$) showed no significant variation ($Q = 2.32$).

Figure 4 presents the averages of the groups in a graphic form and Table 14 presents the results of trend analysis for the Indian sample.

Satisfaction Scores

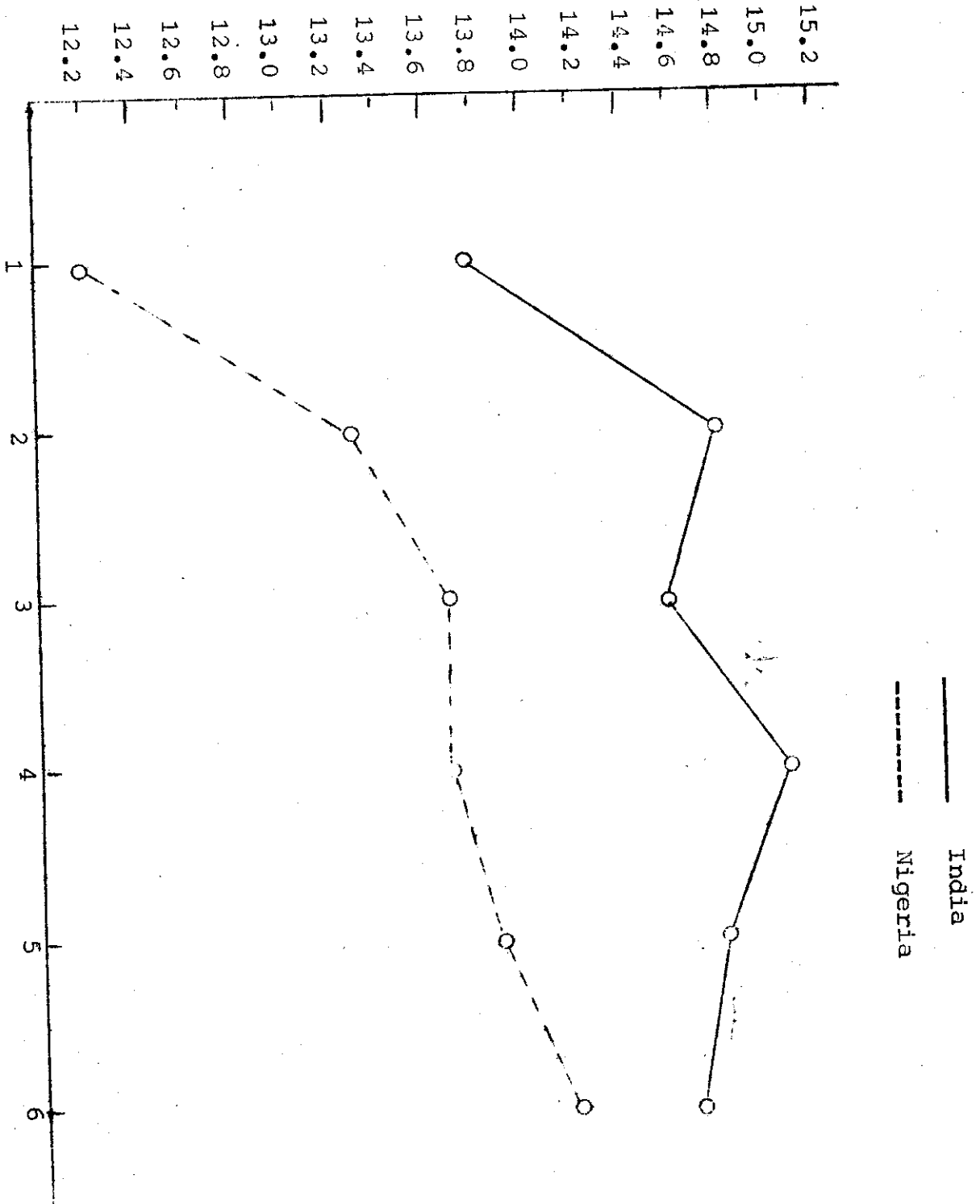


Figure - 4: Mean Satisfaction Scores (Years of Experience)

Note:- For explanations of numericals on horizontal line, See table 1

Table 14

Trend Analysis

Years of Experience (India)

Sources	SS	df	MS	F
Between	101.64	5	-	-
Linear	35.62	1	35.62	4.31*
Quadratic	47.01	1	47.01	5.69*
Other	19.01	3	6.34	.77
Error	5507.16	667	8.26	-

* $P < .05$

The results of trend analysis for Indian sample suggest both significant linear ($F = 4.31$; $df = 1/667$; $P < .05$) and quadratic ($F = 5.69$; $df = 1/667$, $P < .05$) relationship between satisfaction and years of experience.

The trend analysis results for Nigerian sample are presented in Table 15.

Table 15

Trend Analysis

Years of Experience (Nigeria)

Source	SS	df	MS	F
Between	315.07	5	-	-
Linear	76.50	1	76.50	6.22*
Quadratic	11.94	1	11.94	.97
Other	226.63	3	75.54	6.15**
Error	7514.62	611	12.29	-

* $P < .05$; ** $P < .01$

The results of trend analysis in Table 15 suggest that there is a significant linear relationship between job satisfaction and years of experience ($F = 6.22$; $df = 1/611$; $P < .05$). They also suggest a significant relationship for other trend as far job satisfaction vis-a-vis experience are concerned ($F = 6.15$; $df = 3/611$; $P < .01$).

Annual Income

The relationship between annual income and job satisfaction across the samples and country was established by two-way analysis of variance. The results are presented in Table 16.

Table 16

Analysis of Variance
(Annual Income)

Source	SS	df	MS	F
Country (C)	738.79	1	738.79	3.65
Income (I)	70.55	6	11.76	.06
C x I	62.75	6	10.46	.05
Within	281005.67	1376	202.31	-
Total	281877.66	1389	-	-

The results indicate no significant variation in the satisfaction scores either because of country differences or because of differences in the annual income. Planned comparisons between the highest ($\bar{X} = 15.2$) and lowest ($\bar{X} = 14.6$) of Indian samples

and highest ($\bar{X} = 13.5$) and lowest ($\bar{X} = 12.9$) of Nigerian samples showed no significant differences. The values of Q for India and Nigeria turned out to be .47 and .43 respectively.

Trend analysis for Indian sample is presented in Table 17.

Table 17
Trend Analysis
Annual Income (India)

Source	SS	df	MS	F
Between	23.07	6	-	-
Linear	14.68	1	14.68	1.74
Quadratic	6.52	1	6.51	.77
Other	1.87	4	.47	.06
Error	5607.03	667	8.41	-

The results of trend analysis show that none of the trends is significant. Same seems to be case with samples of various income groups from Nigeria. Their results of trend analysis are presented in Table 18.

Table 18
Trend Analysis
Annual Income (Nigeria)

Source	SS	df	MS	F
Between	46.08	6	-	-
Linear	1.95	1	1.95	.15
Quadratic	12.88	1	12.88	1.01
Other	31.24	4	7.81	.61
Error	7844.54	615	12.75	-

The averages of two countries for various income groups are plotted in Figure 5.

So far we have dealt with each one of seven personal characteristics individually to see their effect on job satisfaction. The next level of analysis involved taking all the seven personal characteristics together and examining the extent to which they account for variance on satisfaction. Regression analysis was carried out. The results for both Indian and Nigerian samples are presented in Table 19.

The results of regression analysis indicate that while for Indian sample the personal characteristics explain 34.9% variance in satisfaction, they account for

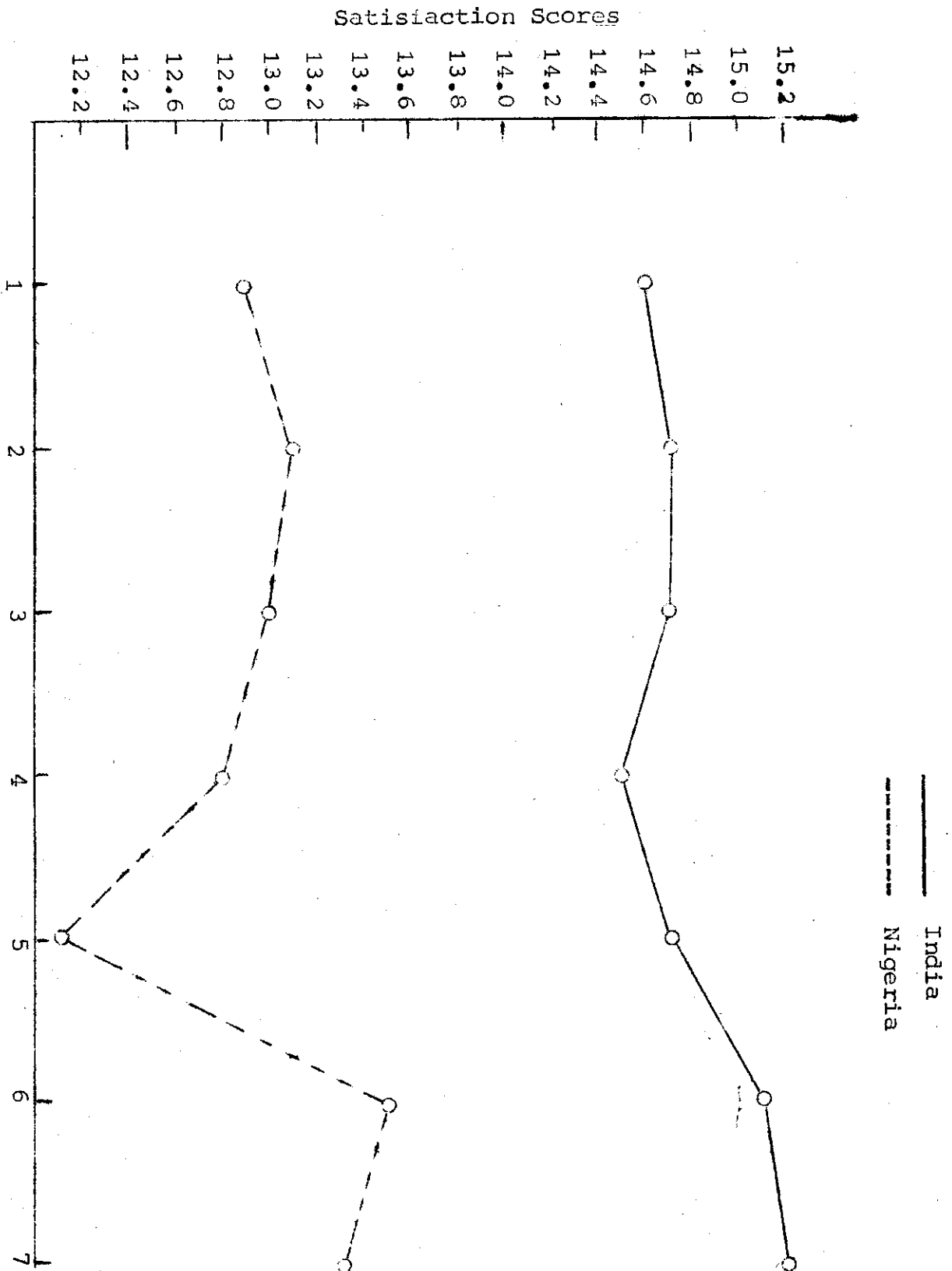


Figure - 5: Mean Satisfaction Scores (Annual Income)

Note: - For explanations of numericals on horizontal line, See Table 1.

Table - 19

Regression Analysis

Variables	India			Nigeria		
	R ²	R ² differ- ence	t-value	R ²	R ² differ- ence	t-value
All Variables	.349	-	-	.717	-	-
Minus Age	.338	.001	-0.92	.716	.001	0.17
Minus Sex	.345	.013	-0.48	.706	.011	0.83
Minus Marital Status	.325	.024	-0.34	.618	.019	-1.54
Minus Dependents	.225	.124	3.10**	.703	.014	0.92
Minus Education	.259	.090	-2.64*	.505	.212	-3.72**
Minus Experience	.346	.003	0.48	.673	.044	1.68
Minus Income	.348	.001	1.02	.709	.008	0.68

* P < .05; ** P < .01 R² difference = the difference between R² for all variable minus R² for individual variables.

71.7% variation for the Nigerian sample. While of all the variables, number of dependents (t = 3.101; N = 778; P < .01) and years of education (t = 2.641; N = 778; P < .05) account for 12.4% and 9.0% drop in the overall satisfaction for Indian sample respectively. For Nigerian sample, significant contribution to the overall variance is made by years of education (t = 3.719; N = 620; P < .01) which explains 21.2% drop in the overall satisfaction.

DISCUSSION

This study was conducted to examine the impact of personal characteristics on job satisfaction singly as well as in interaction with each other. Another purpose was to compare this impact across samples from India and Nigeria. Data were collected on 778 Indian and 620 Nigerian employees representing a variety of organizations.

Age was found to show a significant curvilinear relationship with satisfaction for Indian sample and a significant linear relationship with satisfaction for Nigerian sample. The results of Nigerian sample support the general findings on the sample in the West. Age is an important determinant in one's life, almost all organizations have upper and lower age limits for many jobs. Not only this, age often determines a person's promotion or failure to receive it. This is particularly true in traditional societies where age seems to strongly correlate with the role and the status of the employees in organizations and in society in general. Thus if job satisfaction increases with increasing age, it could be attributed to extrinsic rewards, such as occupational status, authority and autonomy on the job. While this may be true for Nigerian sample, it is not fully true for Indian sample. In case of Indian sample, the satisfaction level starts declining after 45 years. Perhaps in case of India, the decline may account for blockage of channels for self-actualization in occupations.

In most cases in India, employees reach to the top that they are likely to by about 45 years after which stability in occupational growth settles in leading to security rather than satisfaction.

A comparison of male and female samples shows no significant variation in their satisfaction scores. This is true for both Indian and Nigerian samples. This is unlike the general finding in the West where women are found to be more satisfied than men. Perhaps, one explanation could be that if women reject sex role stereotypes and pursue careers, they may experience the same degree of job satisfaction as men. This is certainly true in Nigeria where females are more career oriented. Most of the trading is in the hands of women who safeguard it with strong Women Traders Association. In Indian context, most women perhaps initially take a job as an economic necessity. However, if they stay long enough in the job they see it as a career and hence experience same satisfaction as their male counterparts. The Indian women in our sample represent those in career-oriented jobs.

Another finding indicates that Indian males are significantly more satisfied than Nigerian males. Nigeria being, to a large extent, import dependent country, has not reached to the same level of industrialization as India. This coupled with take it easy attitude of Nigerians minimizes the challenge opportunities available so much more to Indians.

Presence of challenge may require extra efforts and hence higher satisfaction among the Indian male employees.

As far as marital status is concerned, the results show no significant variation between married and single for both the countries. This seems consistent with the findings in the West suggesting that job satisfaction is independent of marital status.

The results of the study show that Indian employees experience significantly higher satisfaction with increasing number of dependents. Same is true for Nigerian sample. This is rather different from the other studies carried out in India or for that matter in the West where bulk of the evidence is in favour of no relationship between number of dependents and job satisfaction. Given the limited number of job opportunities both in India and Nigeria, one may venture to speculate that perhaps being employed in itself may be satisfying for those who have large number of dependents. In case of Nigerian sample, the "other" trend is also significant. A closer look at Figure 2 suggests that satisfaction decreases with increasing number of dependents upto 3 dependents and then increases. Actually the general slope of the curve (See Figure 2) suggests a more linearity than otherwise if we drop the first step which is absence of any dependents.

As far as education is concerned, there seems to be significant country differences. Indians are more satisfied

than Nigerians. However, the most interesting finding has to do with the general trend which shows, like those in the West, that the satisfaction decreases with increasing education and this is true for both India and Nigeria. Increasing education is related to higher expectations and if jobs do not fulfil these expectations, higher dissatisfaction with the job is experienced. In fact, if highly educated employees end up doing routine jobs they feel highly dissatisfied. In case of Nigeria, the quadratic and other trend are also significant. A closer look of Figure 3 suggests that while satisfaction decreases with increasing education upto master's level for Nigerian, for those with Ph.D. degrees and post-master's degree qualifications it registers an upward trend. It is possible that this segment of sample because of high qualification, may be employed in those jobs that are satisfying to them.

The trend analyses for Indian and Nigerian samples show increasing satisfaction with increasing experience unlike the samples from the West where it is generally a U-shape relationship. Perhaps, the increase in experience parallels with increasing age and hence the employee feel higher status, more autonomy and more respect etc. which account for higher satisfaction. In case of India the analysis also shows significant quadratic trend suggesting that while increasing experience is associated with increasing satisfaction upto

a point beyond which it decreases with increasing experience. An examination of Figure 4 indicates that the drops at 3, 5 & 6 levels. (or 10-14 years and beyond 20 years) are not low enough. In fact the highest and lowest averages are not significantly away from each other for Indian sample. Perhaps, the same explanation would hold true in case of other trend being significant for Nigerian sample.

The relationship of job satisfaction and annual income of the employees both in India and Nigeria shows no significant trend further supporting the evidence available in India. However, the evidence on the two samples contradicts the findings in the West where higher income is associated with higher satisfaction. Perhaps, in developing nations the relative worth of money rather than money per se are more important considerations.

When all the seven personal characteristics were combined together to see their effect on job satisfaction (See Table 19) the results showed that they explained 34.9% of variation for Indian sample and 71.7% for the Nigerian sample suggesting that organizational and technological variable may have accounted for the rest. However, the fact that personal characteristics of Nigerian sample account for twice as much of Indian sample is very exciting. It seems that in Nigeria family ties, social status attached to higher age, education and experience etc. do play a very significant role in deter-

mining satisfaction. As the industrialization process grows, organizational and technological variable as against personal characteristics became more important in explaining the job satisfaction. India when compared to Nigeria is certainly more technologically advanced which explains why personal characteristics account for only one half of the job satisfaction when compared to Nigeria. However, when we examine the individual contribution of personal characteristics, education seems to contribute significantly in explaining job satisfaction for samples from both India (9%) and Nigeria (21.2%). In addition to education, number of dependents (12.4%) in case of India also contribute significantly in accounting for job satisfaction.

The results of this study may suggest that the relationship between job satisfaction and personal characteristics is mediated through industrial advancement. In more advanced nations the technology and the organizational variables may contribute more to satisfaction while in less technologically advanced nations, personal characteristics may account more for job satisfaction. Further research in this direction may provide the answer.

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