



**EFFECT OF SOCIAL INTELLIGENT ON ORGANIZATIONAL COMMITMENT:
A STUDY OF SELECTED LISTED FIRMS IN NIGERIA**

Ochugudu Achoda Ipuele, (Ph.D.)

*Department of Business Management
Benue State University, Makurdi*

&

Zozo Terkura

*Department of Management
University of Nigeria, Nsukka*

Adem Terngu Alfred

*Benue Investment and Properties Limited,
Makurdi.*

Abstract

The study seeks to examine the effect of social intelligent on organizational commitment. The study adopted the Cross Sectional Research Design. The population for the study comprises 10,345 staff of manufacturing firms and 385 respondents were sampled from the selected manufacturing firms. Data was obtained from executives of ten (10) manufacturing firms (consumer sector) listed in the Nigerian Stock Exchange. The statistical tools used for the analysis of data includes: descriptive statistic, Correlation tests and the Ordinary Least Square (OLS) multiple regression test, conducted to test the formulated hypotheses. Post regression diagnostic test (PRDT) was also carried out so as to certify the regression model before generalization. This includes: test for Multicollinearity using the VIF test, test for Heteroskedasticity and the Ramsey regression specification-error test for omitted variables (Ramsey RESET) using Stata version 13 software. The OLS results had heteroscedasticity problem [6.59(0.01)] that was significant and that was corrected using robust regression. The result shows among others that: there is significant positive relationship between social skills, organizational awareness, situational awareness and organizational commitment, more so, organizational awareness has the highest contribution to organizational commitment, implying that employees will be more committed to their organization when their managers/heads appreciate their values. The study recommended that there is need to strengthen the social intelligence capabilities of all administrative unit heads and the establishment of an administrative division specializing in the psychological and emotional aspects of the staff

Key Words: social skills, organizational awareness, situational awareness, organizational commitment



1 Introduction

Under performance of Nigerian manufacturing firms could be traceable to organizational conflict that exists at different levels in most business organizations, and the problem lies in the use of the superlative strategies in conflict management without the use of the knowledge of social intelligence and its applications. Prior researchers such as Goleman and Boyatzis (2008) and Frankovsky and Birknerová (2014) stressed on the need of interaction between each other through having the social skills, empathy and other skills that are components of social intelligence. The concept of social intelligence is associated with the assumption of different mental decisions and abilities which deal with the social content by having a set of skills (Rahim et al., 2016). This set of skills have been observed to help individuals to solve their social problems, which include the ability to understand the feelings, thoughts, and behaviors of others in different situations and social conditions (Eshghi et al., 2013).

Many studies such as Dijkstra et al. (2011); Salem, (2013); Moeller & Kwantes, (2015); Rahim, (2016) and Qadri & Khan, (2016) emphasize that organizational conflict exists at different levels in most business organizations, and that the difficulty in dealing with the conflict lies in the use of the ideal strategies in managing the conflict. At the end of their studies, they recommended that other researchers should investigate it with respect to the dimension of social intelligence. This is more so that previous studies examined the employee's effective commitment from different variables, such as emotional intelligence, cultural intelligence, social intelligence and others. Al-Qadri & Khan (2016) recommended studying deeply the emotional intelligence and behavioral aspects of the organizational conflict management strategies. More so, Rahim et al., (2016) recommended further studies on the importance of social intelligence using different approaches because of the lack of similar studies just as Al-Jarrah and Asleh (2016) also recommended conducting further studies on the same issue of social intelligence. To this end, since there seem to be paucity of studies in this area particularly as it relates to the effect of social intelligence on employees' commitment, this study is thus undertaken to bridge this gap by attempting an examination of the effect of social intelligence on organizational commitment in listed manufacturing firms in Nigeria. Therefore, the general objective of this study is to investigate



the variables of the social intelligence and its impact on employee's effective commitment. The specific objectives are: to examine the effect of (Social Skills, Organizational Awareness and Situational Awareness) on organizational commitment in listed manufacturing firms in Nigeria.

Research Hypotheses:

H₀₁: There is no significant relationship between social skills and organizational commitment

H₀₂: There is no significant relationship between organizational awareness and organizational commitment

H₀₃: There is no significant relationship between situational awareness and organizational commitment

2. Literature Review and Theoretical Framework

The concept of Social intelligence

Social intelligence is also Business intelligence. It overcomes barriers, dramatically improves performance and maximizes personal and organizational success. Social intelligence is the ability to manage the human relations. Frankovsky & Birknerova, (2014) emphasized that the skills of social intelligence assist managers to attain to individual employee's needs irrespective of their age bracket. Rahim et al., (2016) have defined social intelligence as the ability of being aware of related social situations, and how to handle situational challenges effectively by understanding others' concerns, feelings, building and maintaining positive relationships in social settings. Besides, Lee et al., (2000) have defined social intelligence from two sides; the first is the cognitive side which includes the individual's ability to understand and solve verbal and non-verbal behavior of others, and the second one is the behavioral side which occurs when individuals are influenced through interacting with each other. Goleman (2006) has argued that a full understanding of social intelligence requires "non-cognitive" aptitudes and has defined social intelligence as social awareness which



includes: empathy, attunement, social cognition and social facility (relationship management) which includes self-presentation, interaction, influence and concern for others.

Moreover, Albrecht (2006) has defined social intelligence as the ability to realize social relations, understand and wisely interact with individuals in social situations; thus, this leads to the social acceptance and individual success in the social and professional life. He also opines that social intelligence depends on the five main skills which include, situational awareness, presence, authenticity, clarity, and empathy. The procedural view of Social Intelligence is that, it is a set of practices including (organizational awareness, social skills, empathy, situational awareness and situational response) which are exercised by managers in their works. These are expatiated as thus:

Organizational awareness:

It is the ability of how to understand and appreciate the culture, values, and norms of employees in organization (Goleman & Boyatzis, 2008). The procedural definition of organizational awareness is that it's a set of practices which are exercised to understand attitudes of employees, appreciation employees' customs and traditions, beliefs and values, and try to understand unspoken norms in the organization (Bennis, 2006).

Social skills:

Rahim et al., (2016) see social skill as the ability to speak clearly and to negotiate and manage conflict by building and maintaining positive relationships with employees. Procedurally, social skills are a set of practices which are exercised in order to negotiate and respect employees through interacting and building good relations with them (Goleman, 2006).

Situational awareness:

To Rahim, (2014), situational awareness is seen as the employee's ability of collecting information for inspection and formulation of problem/s. This ability is very important for employee's success in life and leadership. Procedural definition of situational awareness: a set of practices which are exercised to read the situation by evaluating and analyzing the conflict issues (Goleman, 2006).



Other scientists like (Goleman, 2006) gave precise details about the social intelligence concept and pointed out three systems as: 1-Social control, which concentrates on social roles with accurate and well organized way and high proficiency. 2. Social expression, which presents accurate description and idea translation into sensitive sentences and meanings. 3 - Social sensitivity, which shows a person's daily interaction with events.

Organizational commitment

Organizational commitment is considered a key factor in organizational effectiveness. Organizational commitment predicts changes in organizational outcomes such as improving job performance, reducing staff turnover, eliminating perceptions, reducing absenteeism and improving organizational citizenship (Sinha & Jain, 2004; Herscovitch, Topolnystsky, Stanley & Meyer, 2002; Meyer & Allen, 1997; Mathieu & Zajac, 1990).

Behavioral Commitment Theory

The behavioral conceptualization and theory of organizational commitment is perhaps best conceptualized by Mowday, Porter & Steers (1982) that behavioral commitment relates to the process by which individuals become locked into certain organizations. The theories of behavioral commitment posit that an individual's psychological state of commitment to an organization is a consequence of the actions of the individual. Under this theoretical lens, an individual's behavior also creates the conditions through which a psychological state of commitment is reached.

Meyer and Allen (1991), when contrasting the behavioral perspective and the attitudinal perspective of commitment, describe the behavioral perspective as a cycle that starts and ends with the individual's behavior. Salancik (1977), in the primary work on behavioral commitment, argued that organizational commitment arises out of (a) an attachment to the individuals own freely chosen actions, (b) a perceived obligation to follow through with these actions, and (c) the perceived costs of continuing or not continuing the actions. These three actions as conceptualized in this theory appropriately explains the concerns of this study thus justifying why the study is anchored on this theory.

Conceptual Framework

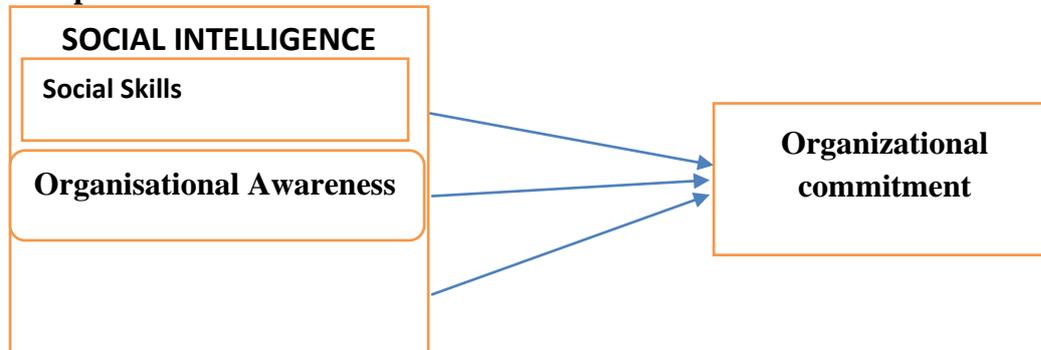


Figure 1: Conceptual Framework

Source: The model was developed based on the following studies:Independent variable: (Al-Qadri & Khan, 2016; Mayer and Salovey, 1993; and Kobe, Reiter-Palmon, & Rickers, 2001).

Studies on Social Intelligence

Many scholars and researchers have disagreed on the classification of social intelligence and emotional intelligence. Some researchers, such as Mayer and Salovey (1993); and Kobe, Reiter-Palmon, & Rickers, (2001) have categorized emotional intelligence as a part of social intelligence. On the other hand, Goleman (1998) classified social intelligence as a part of emotional intelligence. More so, Goleman (2001) sees emotional intelligence as resulting from the intersection of interpersonal intelligence and intrapersonal intelligence. In the view of Albrecht (2006), there are six primary dimensions of intelligence: abstract, social, practical, emotional, aesthetic and kinesthetic; and all the dimensions of intelligence depended on each other. In the light of the above, we can see that social intelligence has been classified as separate from emotional intelligence, but also complementary to each other.

Further, some inadequacy in social intelligence emerge from adequate improvement of emotional intelligence, and conversely too. From the researcher's view point, social intelligence is a general term and emotional intelligence is a part of social intelligence. Also social intelligence and emotional intelligence are complementary to each other.

Previous Studies

Kobe, et al., (2001) in their study, self-reported leadership experiences in relation to inventoried social and emotional intelligence, attempted to examine the power of both emotional and social intelligence to account for variance in self-reported leadership



experiences. The data were collected from 192 students of university. The findings showed that both social and emotional intelligence accounted for the variance in leadership experiences. Although emotional intelligence was found to account for the variance in leadership, it did not add unique variance beyond social intelligence. Social intelligence therefore appears to play a major role in leadership.

Hooda et al., (2009) in their study, social intelligence as a predictor of positive psychological health, attempted to investigate the relationship between positive psychological health and social intelligence. The data were collected from 36 firms with a sample size of (300) workers (170 males and 130 females) they were selected from Chandigarh, Delhi and various cities of Haryana. Social intelligence was measured using six factors (patience, spirit of cooperation and trust, recognition of social environment, tact, humor, memory). The results of the study showed a positive relationship between the two components of positive mental health (satisfaction with life and happiness) and factors of social intelligence (spirit of cooperation, sensitivity, patience, confidence, tact, sense of humor).

Moeller & Kwantes (2015) in their study, “too much of a good thing?” emotional intelligence and interpersonal conflict behaviors, aimed to exam the relationship between conflict management preferences and conflict management behaviors and test how emotional intelligence shapes this preference behavior relationship. The data were collected from (109) young adults enrolled at a Canadian university and the sample consisted of (23) males and (86) females with different origins. The findings showed that emotional intelligence has two sides positive and negative. If the individual is not inclined toward anti-social behaviors, then the likelihood of those anti-social behaviors is reduced, and the individual has a high degree in emotional intelligence. But, if the individual is leaning toward dysfunctional behaviors, it means the emotional intelligence will be increasing to the likelihood of those behaviors. In addition, the emotional intelligence amplifies individuals’ tendencies towards specific conflict management strategies. And in the absence of social constraints, the conflict management's styles will predict actual conflict behaviors even if those behaviors are generally considered less desirable.



Al-Qadri & Khan, (2016) in their study, linking personality and emotional labor: the mediating role of relationship conflict and conflict management styles, aimed to test the mediating role of relationship conflict and conflict management styles on the relationship of personality and emotional labor. The data were collected from the answers of 450 managers and workers in bank, and the data were selected randomly. The findings showed that emotional labor can be controlled and reduced by 43% using appropriate conflict management style and by verifying the pivotal role of personality in relation to emotional labor, relationship conflict and the choice of conflict management style.

Al-Jarrah & Asleh, (2016) in their study, social intelligence and conflict management strategies among high intact students and those with problematic behavior in secondary stage, aimed to investigate the social intelligence and conflict management strategies among high intact students, and those with problematic behavior in the secondary stage. The data were collected from the answers of (439) male and female students of secondary stage students of Al-Galilee district in Palestine who were randomly selected. The results showed that the level of social intelligence among intact students and those with problematic behavior was high, where the integrating strategy was mostly used among them, and the avoiding one was less used. In addition, the results revealed that there were statistically significant differences between males and females in integrating emotional expressions and avoiding strategies, and between intact students and those with problematic behaviour in dominating and avoiding strategies.

3. Methodology

The study adopted the cross-sectional research design. The population of the study consisted of 10, 345 employees in managerial Cadre of nineteen (19) manufacturing firms listed in Nigeria stock exchange. The sample for the study comprised of 385 employees in managerial Cadre (unit heads, supervisors, departmental heads and top executives). The instrument used for gathering data was the structured questionnaire. This tool allows a wider coverage since researchers can approach respondents more easily (Kothari, 2012). The study used the survey method in sending the questionnaire across to respondents via email addresses. The



questionnaire had two sections – A and B. Section A captured the bio data of the respondents. While session B captures the Social Intelligence Index (SII) scales adopted from (Hooda et al., 2009: Alhassan et al., 2014: Rahim, 2014: Al-Qadri & Khan, 2016) used to elicits information about the degree of psychological acceptance to the questions on social intelligence dimensions (organizational awareness, social skills and situational awareness). Section C sought opinion on the Organizational commitment, using the adjusted five-point Likert type scale.

The response ranged from 1-5; strongly disagree, disagree, neutral, agree and strongly agree. Descriptive statistics (simple percentage, frequency distribution, mean and standard deviation), correlation and multiple regression methods were used for analysis, Post regression diagnostic test (PRDT) was carried out so as to certify the regression model before generalization, which includes: test for Multicollinearity using the VIF test, test for Heteroskedasticity and the Ramsey regression specification-error test for omitted variables (Ramsey RESET). The study used stata version 13 as the statistical package for data analysis.

Model Specification

Organizational Commitment = f (Social Intelligence)

ORGCM = f (SOCSK, ORGEW and SITAW)1

ORGCM = $\beta_0 + \beta_1$ SOCSK + β_2 ORGEW + β_3 SITAW + ϵ 2

Where:

ORGCM = Organizational commitment

SOCSK= Social Skills,

ORGEW = Organizational Awareness

SITAW = Situational Awareness

4.0: Results

Three hundred and forty-five (345) copies of the questionnaire was administered. However, two hundred and twenty-four (224) copies were returned, four copies of the questionnaire has some unanswered questions while two hundred and twenty (220)copies of questionnaire



(64%) were used for analysis in the study. The low respond rate (64%) may be attributed to the busy nature of these class of respondents(unit heads, supervisors, departmental headsand top executives of selected listed manufacturing firms).

Table 1: Descriptive Statistics

variable	mean	p50	max	min	N
orgcm	3.822727	4	5	1	220
socsk	3.777273	4	5	1	220
orgew	3.863636	4	5	1	220
sitaw	3.9	4	5	1	220

Source: Stata version (13)

The descriptive statistics in Table 1 indicates high agreement rate for all the constructs with mean score above 3.7 for all the construct, using sample size of 220.

Table 2: Normality Test

Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
orgcm	220	0.0000	0.0769	24.81	0.0000
socsk	220	0.0000	0.5667	16.81	0.0002
orgew	220	0.0000	0.0033	33.08	0.0000
sitaw	220	0.0000	0.0025	32.35	0.0000

Source: Stata version (13)

Table 2 shows that the data used is normally distributed

Table 3: Correlation between the studied variables

	orgcm	socsk	orgew	sitaw
orgcm	1.0000			
socsk	0.4627	1.0000		
orgew	0.5103	0.4022	1.0000	
sitaw	0.5189	0.5973	0.4296	1.0000

Source: Stata version (13)

Table 3 indicated that the correlation between social intelligence and organizational commitment were positively correlated and this correlation is statistically significant. This result indicates the importance of social intelligence to create positive work climate to



enhance organizational commitment. This result is similar to the findings of (Goleman & Boyatzis, 2008; Frankovsky & Birknerova, 2014; Al-Jarrah & Asleh, 2016).

Table 4: Regression Model (ORGCM used as the Dependent variable)

Variables	OLS Regression	Robust Regression
C	.528 (0.067)	0.006 (0.979)
SOCSK	0.169*	0.243*
ORGEW	0.350*	0.421*
SITAW	0.333*	0.312*
Adj R-Squared	0.378	0.378
F-Statistic	45.49*	246.88*
VIF Test (Mean)	1.52	
Heteroskedasticity	6.59**	
Ramsey RESET test	0.37 (0.777)	
Observation	220	192

*Author (2019), Note: * and ** represent 1% and 10% level of significance respectively. Values in () are the respective P-values. (As computed from Appendix 1)*

Discussion of Results

In table 4, we observed from the OLS multiple regression that the adjusted R-squared value of 0.37 which shows that about 37% of the systematic variations in the dependent variable in the studied companies over the period of interest was jointly explained by the independent variables.

The F-statistic value of 246.88 and its associated P-value of 0.000 (for the Robust regression) shows that the Robust regression model on the overall is statistically significant at 1% level, this means that the Robust regression model is valid and can be used for statistical inference. Table 4 also shows a mean VIF value of 1.52 which is less than the benchmark value of 10,



this indicates the absence of multicollinearity, and this means no independent variable was dropped from the model. Also from the table above, it can be observed that the OLS multiple results had heteroscedasticity problem [6.59(0.01)] that was significant and was corrected using robust regression. Therefore, in testing our hypotheses we provide the below specific analysis for each of the independent variables:

Social Skills (SOCSK) and Organizational Commitment(OLS robust = .423 (0.006) with p-value < 0.05. Hence, Social skill(SI) has a positive and significant influence on organizational commitment at 1% level. Thenull hypothesis 1 is rejected, implying that “there issignificant positive relationship between Social Skills and Organizational Commitment”. This result agrees with prior empirical results ofKobe, et al., (2001), Hooda et al., (2009), Alok et al., (2014), Alhassan et al., (2014), and Rahim, (2014) which also found that the ability of employees to interact with others in the work environment in multiple ways is mutually beneficial and these skills develop by learning and practice to reach a high degree of proficiency, speed and good behavior.

Organizational Awareness (ORGEW) and Organizational Commitment(OLS robust = .421 (0.000) with p-value < 0.05.This therefore means that the null hypothesis 2 is rejected,implying that “there is significant positive relationship betweenOrganizational Awareness and Organizational commitment”. This result agrees with prior empirical results of Kobe, et al., (2001), Dijkstra et al., (2011) and Alhassan et al., (2014) which also revealed that employee becomes more committed to their organizationwhen they respect and understand their culture, so that the employee understands the causality of positions and the reasons behind them without developing negative attitudes.

Situational Awareness(SITAW) and Organizational Commitment (OLS robust = .312 (0.001) with the p-value < 0.05. This therefore means that null hypothesis 3 is rejected, implying that “there is significant positive relationship between Situational Awareness and Organizational commitment”. This result is in agreement with prior empirical results of Rahim, (2014) which shows that there's high degree of “Situational Awareness”, among the



sample of study, which represent a good quick behavior to read the situation at the moment, and thus contributes to the accumulation of positive experiences among employees.

Conclusion

One of the basic human needs is social relationship. Therefore, in a company where social relationships are important component of their day to day life, having enduring and enjoyable social ties will promote happiness, healthier life and committed workforce. Social intelligence is associated with the assumption of different mental decisions and abilities which deal with the social content by having a set of skills. This set of skills helps individuals to solve their social problems, which include the ability to understand the feelings, thoughts, and behaviors of others in different situations and social conditions. Employees will therefore be more committed to their organization when their heads appreciate their values and beliefs in the organization, appreciates employees' customs and traditions, tries to understand employees' attitudes in the organization, as well as understand unspoken norms in the organization. When the level of social intelligence in organizations is high; it indicates that the heads has a high practices of social intelligence skill, which implies that the companies have ability of dealing with conflict; this is an indicator that they are trying to create a positive friendly work environment. On the whole, since social intelligence has an impact on organizational commitment, it means that by adopting new practices of social intelligence, the organization commitment will also increase thus enabling the organization to succeed.

Recommendations

1. The study recommended the need to strengthen the social intelligence capabilities of all administrative unit heads and the establishment of an administrative division specializing in the psychological and emotional aspects of the staff
2. Organizations should train their employees on the implement of social skills.



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APPENDIX 1: LISTED CONSUMER FIRMS IN NIGERIA STOCK EXCHANGE

S/N	Full Company name	Listing Status	Exchange Sector	Total Asset	Revenue	Number of Staffs	Number of Management Staffs	Sample Size
1	Multi-Trex Food	Ngse	Consumer	399,342,228	380,161,113	1,992	1,024	(1,024/10,345)*385=38
2	Nigeria Breweries	Ngse	Consumer	367,146,468	313,743,147	3,646	2182	(2,182/10,345)*385=81
3	Flour Mills Of Nigeria	Ngse	Consumer	345,348,842	342,586,459	1,611	715	(715/10,345)*385=26
4	Dangote Sugar	Ngse	Consumer	178,381,640	169,724,936	1,419	692	(692/10,345)*385=25
5	Nestle Nig	Ngse	Consumer	169,585,932	181,910,977	2,325	1289	(1289/10,345)*385=48
6	Guinness Nig	Ngse	Consumer	136,992,444	101,973,030	1,344	712	(712/10,345)*385=26
7	Tiger Branded	Ngse	Consumer	78,979,982	105,765,324	1,615	774	(774/10,345)*385=29
8	Honywell Flour Mill	Ngse	Consumer	76,046,576	50,883,780	844	312	(312/10,345)*385=11
9	Pz Cussons	Ngse	Consumer	74,430,174	69,527,537	1,786	1128	(1128/10,345)*385=42
10	Unilever Nig	Ngse	Consumer	72,491,309	69,777,061	1,207	771	(771/10,345)*385=29
11	7Up Nigeria	Ngse	Consumer	67,796,611	85,634,679	2,759	129	(129/10,345)*385=5
12	International Breweries	Ngse	Consumer	33,482,106	23,269,364	529	268	(268/10,345)*385=10
13	Cadbury Nig	Ngse	Consumer	28,392,951	29,979,410	727	332	(332/10,345)*385=12
14	Nascon Allied	Ngse	Consumer	24,603,267	18,291,792	485	217	(217/10,345)*385=8
15	Vitafoam Nig	Ngse	Consumer	13,345,546	13,569,873	742	345	(345/10,345)*385=12
16	Champion Breweries	Ngse	Consumer	9,961,240	3,864,943	162	88	(88/10,345)*385=3



17	Nigerian Enamelware	Ngse	Consumer	4,539,683	2,795,190	309	207	$(207/10,345)*385=7$
18	Nigerian Northern Flour Mill	Ngse	Consumer	3,934,647	979,038	65	42	$(42/10,345)*385=2$
19	McNichols Consolidated	Ngse	Consumer	475,140	1,093,805	72	38	$(38/10,345)*385=1$
					Revenue	23,539	10,345	385

NSE (2018) and MachameRatios® compilation

APPENDIX 2

Session B

Organizational commitment	1	2	3	4	5
Organizational Awareness,					
The manager appreciates employees' values in the organization.					
The manager appreciates employees' customs and traditions.					
The manager tries to understand employees' attitudes in the organization.					
The manager appreciates employees' beliefs in the organization.					
The manager tries to understand unspoken norms such as (the way employees welcome each other) in the organization.					
Social Skills					
The manager does not face difficulty to open a dialogue with employees.					
The manager respects employees' opinions whatever their opinions are.					
The manager has the ability to negotiate employees effectively in work.					
The manager has the ability to interact with different employees.					
The manager gives hand to employees in the organization					
Situational Awareness					
The manager has the ability to understand conflict issues quickly.					
The manager has the ability to determine the underlying reasons of any problem.					
The manager has the ability to analyze conflict issues precisely to find a solution.					
The manager has the ability to evaluate conflict issues correctly.					
The manager has the ability to point out the risks and gains of various situations.					



Session C

S/n	Organizational commitment	1	2	3	4	5
1	I would not leave my organization right now, because I have a sense of obligation to the people in it.					
2	Even if it were to my advantage, I do not feel it would be right to leave the organization					
3	Right now, staying with my organization is a matter of necessity as much as desire					
4	One of the major reasons I continue to work for this organization is that leaving would require a considerable amount of personal sacrifice – another organization may not match the overall benefits I have here.					

Appendix 3: RESULTS

variable	mean	p50	max	min	N
orgcm	3.822727	4	5	1	220
socsk	3.777273	4	5	1	220
orgew	3.863636	4	5	1	220
sitaw	3.9	4	5	1	220

Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
orgcm	220	0.0000	0.0769	24.81	0.0000
socsk	220	0.0000	0.5667	16.81	0.0002
orgew	220	0.0000	0.0033	33.08	0.0000
sitaw	220	0.0000	0.0025	32.35	0.0000



	orgcm	socsk	orgew	sitaw
orgcm	1.0000			
socsk	0.4627	1.0000		
orgew	0.5103	0.4022	1.0000	
sitaw	0.5189	0.5973	0.4296	1.0000

Source	SS	df	MS	Number of obs =	220
Model	82.116173	3	27.3720577	F(3, 216) =	45.49
Residual	129.970191	216	.601713846	Prob > F =	0.0000
Total	212.086364	219	.968430884	R-squared =	0.3872
				Adj R-squared =	0.3787
				Root MSE =	.7757

orgcm	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
socsk	.1692061	.0698026	2.42	0.016	.0316247 .3067875
orgew	.3507962	.0653793	5.37	0.000	.221933 .4796593
sitaw	.3331958	.0812508	4.10	0.000	.1730498 .4933417
_cons	.5287774	.2874078	1.84	0.067	-.0377055 1.09526

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of orgcm

chi2(1) = 6.59

Prob > chi2 = 0.0102

Ramsey RESET test using powers of the fitted values of orgcm

Ho: model has no omitted variables

F(3, 213) = 0.37

Prob > F = 0.7775



Variable	VIF	1/VIF
sitaw	1.67	0.600431
socsk	1.62	0.617205
orgew	1.28	0.782449
Mean VIF	1.52	

Variance-weighted least-squares regression

Goodness-of-fit chi2(18) = 14.94

Prob > chi2 = 0.6660

Number of obs = 192

Model chi2(3) = 246.88

Prob > chi2 = 0.0000

orgcm	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
socsk	.2439258	.0884092	2.76	0.006	.070647 .4172046
orgew	.4214351	.0845682	4.98	0.000	.2556845 .5871858
sitaw	.3121807	.0939997	3.32	0.001	.1279446 .4964167
_cons	.0067422	.2514434	0.03	0.979	-.4860778 .4995622
