

MODELLING AFFECTIVE COMMITMENT IN RELATION TO TRANSFORMATIONAL, TRANSACTIONAL AND PASSIVE AVOIDANT LEADERSHIP STYLES USING ORDINAL REGRESSION MODEL

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ABSTRACT

This empirical study was conducted on fifty organized retail companies, having their stores and offices in Lucknow, India to assess the effect of Transformational, Transactional and Passive Avoidant leadership styles on the employee Affective Commitment. Five hundred employees including store owners, supervisors and managers and aisle staff responses were measured on Multifactor Leadership Questionnaire Form 5X and on a part of Organizational Commitment Questionnaire. IBM SPSS 20, Ordinal Regression model with probit link function was used for statistical analysis.

The statistical analysis predicts a strong positive relationship between Transformational leadership style and Affective Commitment followed by Passive avoidant leadership closely followed by transactional leadership style.

Keywords: Transformational Leadership, Transactional Leadership, Passive Avoidant Leadership, Affective commitment, Ordinal Regression, retail management.

1. INTRODUCTION

The aim of this paper is to analyse the effects of transformational, transactional and passive avoidant leadership styles on employee affective commitment. The study is a major contributor to the Personnel Management as well as marketing and retail sectors of the Lucknow city, now the most promising business and retail confluence for the national and international companies. As a result, it's critical to delve deeper into the elements that influence various employee outcomes in Lucknow's retail industry.

2. LITERATURE REVIEW

According to **Stredwick (2005)**, a lot of academics cite the commitment level as a significant indicator of organizational success from the perspective of people management. All organizations are concerned about an employee's commitment since it has been attributed to lower turnover and increased information sharing, higher organizational

citizenship as well as higher acceptance of organizational change, also ethical behavior as well as lower absenteeism.

In General, difference in levels of commitment is a major contributor to employees staying with or leaving an organization as stated by **Shaw et al. (1998)**. It has been observed that if commitment level is low, employees are not ready to develop their skillset or competencies or being willing to take enhanced responsibilities for quality, work organization or problem solving, and willing to contribute any improvements and innovations in their outcome.

As argued by **Colbert and Kwon (2000)** the reason research on organizational commitment has gained importance is because of the links between organizational commitment and different measures of organizational effectiveness, as per **Beck and Wilson (2000)** Organizational commitment was found to be predictive of organizational behavior.

According to the study by **Barling et al. (1996)**, training in transformational leadership style

increases the organizational affective commitment. Hence, if the predicate of commitment is known, a training program for improvising employee's affective commitment to the organization can be formulated.

After critically analyzing the extensive data from various researches on factors greatly affecting employee commitment, **Sewak and Singh (2018)** concluded that demographics, specifically age and tenure of service, play a role in some types of employee commitment, but organizational policies and the role of leaders in the organization are the major difference makers that have a major impact on employee commitment.

Based on the earlier research in the field indicating the role of leadership on employee commitment we test the effect of the Transformational, Transactional and Passive avoidant leadership styles on the employee affective commitment.

3. OBJECTIVE OF THE STUDY

The primary purpose of this study is to assess the effects of Transformational, Transactional and Passive Avoidant Leadership styles on employee's affective commitment of the organized retail outlets of Lucknow.

4. HYPOTHESIS

Based on the proposed objective, following 3 hypothesis needs to be tested and verified:

Ho1: Transformational Leadership (TFLS) style has no significant effect on Employee Affective Commitment in organized retail sector in Lucknow region.

Ha1: Transformational Leadership (TFLS) style has significant effect on Employee Affective Commitment in organized retail sector in Lucknow region.

Ho2: Transactional Leadership (TSNL) style has no significant effect on Employee Affective Commitment in organized retail sector in Lucknow region.

Ha2: Transactional Leadership (TSNL) style has a significant effect on Employee Affective Commitment in organized retail sector in Lucknow region.

Ho3: Passive Avoidant Leadership (PALS) style has no significant effect on Employee Affective Commitment in organized retail sector in Lucknow region.

Ha3: Passive Avoidant Leadership (PALS) style has significant effect on Employee Affective Commitment in organized retail sector in Lucknow region.

5. RESEARCH DESIGN

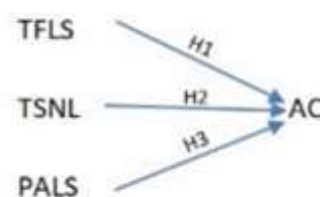


Figure I: Depicts the relationship between Transformational (TFLS), Transactional (TSNL) and Passive Avoidant leadership (PALS) styles, the three predictor variables and employee affective commitment (AC), the response variable, as perceived for this study that is the model to be tested. H1, H2, H3 are the three hypotheses to be tested.

6. RESEARCH METHODOLOGY

6.1. Survey Instrument:

The research instrument was a structured questionnaire to collect primary data from the managers. This instrument was divided into

three sections. 'Section A' was to record the demographics of the respondents and 'Section B' is a 5-point Likert scale ranging from 1, to 5, to assess which is the predominant Leadership style practiced in these organizations. For this the Multifactor Leadership Questionnaire (MLQ form 5X) was used, formulated by **Avolio and Bass (2004)**. Here the respondent (employee) assesses the leadership style of his immediate supervisor or manager. 'Section C' was designed to measure the constructs of employee commitment i.e. affective, continuance and normative commitment of the employees using the Organizational Commitment Questionnaire (OCQ) by **Meyer and Allen (1991)** again a 5 point likert scale ranging from 1 to 5. Here the respondent assessed his own commitment. For the scope of this paper, only affective commitment section of the OCQ was used.

6.2. Sample:

Through stratified random sampling 500 employees and managers from 50 organized retail outlets based in Lucknow were selected. The questionnaire was handed over to the store manager with instructions to get it filled by the store employees at all levels and collected the next day. Some of the questionnaires were completed by personal interview of the respondents. Few of them were emailed to the store managers in the form of Google forms.

6.3. Pilot testing for scale reliability:

For internal consistency check, an initial sample data of 50 units was put to Cronbach's Alpha test. As seen in the table I, all the 54 items from both the scales, MLQ and OCQ evaluated Cronbach's Alpha analog of 0.814 which well above the acceptable 0.7 limit. Hence the scale is deemed fit for internal consistency.

Cronbach's Alpha	No. of Items
.814	54

7. ANALYSIS, RESULTS AND DISCUSSION

The data was put to test in IBM SPSS version 20. Since the measuring scale was a categorized 5 point Likert scale Ordinal Logistic Regression model was used to get the estimates. On further testing for model fit, probit link function was found to be most suitable among the 5 link functions SPSS gives with ordinal regression model.

Here in table II, preliminary screening of data states the distribution of units under each response category of the outcome variable and their marginal percentage is predicted. Most of the respondents are split between 'disagree' and 'agree' with 31.8 per cent and 29.8 per cent respectively. The data set is of 500 units out of which none is missing.

		N	Marginal Percentage
Affective Commitment	Strongly Disagree	22	4.4%
	Disagree	159	31.8%
	Neutral	94	18.8%
	Agree	149	29.8%
	Strongly Agree	76	15.2%
Valid		500	100.0%
Missing		0	

Total	500	
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7.1. Model Fitting Information- To ensure if the model enables us to evaluate the outcome better. This is done by comparing the baseline model also known as intercept only model without any explanatory variables to the final model i.e. the model with all the explanatory variables. For this SPSS compares -2 log

likelihood values for the intercept only model and the final model. There is also a Chi-Square value to determine if the final model gives a significant improvement in model fit as compared to the intercept only model. If it gives a significant result then the final model is said to be a better fit to the data.

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	726.791			
Final	237.110	489.681	3	.000
Link function: Probit.				

As tabulated in table III, the -2 Log Likelihood value= 726.79, P= 0.000 at 95 per cent level of significance. Hence we can say that the final model is a better fit to data to predict the outcome category as compared to the baseline model.

7.2. Pseudo R-Square- Pseudo R-Square is the test of variance the final model predicts on the outcome variable. Unlike, linear regression, logistic and ordinal regression models generate 3 variants of R-Square values. Compared to several other commonly-used indices, Nagelkerke index consistently results in the

highest R-Square analog values, and appeared to be the most closest approximate of the OLS estimate of R-Square as per **Smith & McKenna (2012)**. Hence, for this study we will consider Nagelkerke Value. Higher R Square value indicates that more variance in the outcome variable can be predicted by the explanatory variables. Maximum value being 1. Any value higher than 0.7 indicates a higher proportion of variance in the outcome variable predicted by the explanatory variable. For social sciences any value higher than 0.6 is also considered a good indicator of model fit.

Cox and Snell	.624
Nagelkerke	.660
McFadden	.335
Link function: Probit.	

As tabulated in table IV, Pseudo R-Square Nagelkerke value is 0.660 i.e. 66 per cent of variance in the outcome variable can be predicted by the explanatory variables. Hence deduced that the model is a good predictor of the outcome.

7.3. Test of Parallel lines: The basic assumption of Ordinal Regression is the assumption of Proportional Odds. According to **Frey and**

Osborne (2017) when the relationship between the Independent variables are the same across all possible comparisons involving the dependent variable then the assumption of proportional odds is said to be satisfied.

When the result of the test of Parallel Lines indicates non-significance at 95 per cent level of significance we accept the null hypothesis. The null hypothesis for this test states that the slope

coefficients in the model are the same across all response categories and the lines of the same slope are parallel to each other. This is interpreted that the assumption of parallel lines is satisfied.

In the results from our analysis table V, we interpret the non-significant results to indicate that the assumption of proportional Odds is satisfied as $p = 0.997$.

Table V. Test of Parallel Lines for AC

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Null Hypothesis	237.110			
General	235.632 ^b	1.478 ^c	9	.997
Link Function: Probit				

7.4.Parameter Estimates- Parameter Estimates table VI is the main analysis predicting the relationship and the magnitude of the relationship between the outcome and the predictor variables. The threshold parameters

predict the points (in terms of logit) or the categories in which the employee’s commitment can be predicted into the higher category. The threshold parameter estimates are not interpreted individually.

Table VI. Parameter Estimates for AC

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[AC = 1]	2.077	.218	90.936	1	.000	1.650	2.504
	[AC = 2]	4.001	.229	304.034	1	.000	3.551	4.450
	[AC = 3]	5.337	.298	320.191	1	.000	4.752	5.921
	[AC = 4]	6.969	.342	414.595	1	.000	6.298	7.640
Location	TFLS	.658	.092	50.787	1	.000	.477	.839
	TSNL	.374	.082	20.890	1	.000	.214	.534
	PALS	.441	.085	27.162	1	.000	.275	.607

Link function: Probit.

7.5.Odds Ratio: In table VII, the exponential value Exponent (B) of estimates column contains odds ratios. The estimates (B) are the log of odd ratios. It implies that holding the remaining independent variables constant, Odds ratio reflect the multiplicative change in the odds of dependent variable of being in a higher category for every one unit increase on the independent variable.

being in a higher level category as values of an independent variable increases.

An odds ratio of greater than 1 indicates an increasing probability of outcome variable of

Whereas a ratio of lesser than 1 suggests a decreasing probability of the outcome variable of being in a higher level category with increasing values of an independent variable.

An odds ratio of equal to 1 suggests no predicted change in the likelihood of outcome variable as values of an independent variable increase.

Table VII. Odds ratio

			Exponent (B) for Ac	

		Estimate	Exponent B Value	Sig.
Threshold	[AC = 1]	2.077	7.98	0.000
	[AC = 2]	4.001	54.65	0.000
	[AC = 3]	5.337	207.89	0.000
	[AC = 4]	6.969	809.16	0.000
Location	TFLS	0.658	1.93	0.000
	TSNL	0.374	1.45	0.000
	PALS	0.441	1.55	0.000

Table No. VI and table No. VII indicates that all the estimates for Transformational Leadership (TFLS) Transactional Leadership (TSNL) and Passive Avoidant leadership (PALS) is significant.

Transformational Leadership style (TFLS) has a significant positive effect on the Affective commitment (AC) of the employees of retail outlets of Lucknow. Significance value $p=0.000$, $B=0.658$, Exponent (B)= 1.93 means that with every one unit increase in TFLS the odds of employee's Affective commitment falling into higher category increases by 1.93 times. Hence, the null hypothesis 1 is rejected.

Ho.1: Transformational Leadership style does not have any effect on employee affective commitment in organized retail sector in Lucknow region.

Transactional Leadership style (TSNL) has a significant positive effect on the Affective Commitment of the employees of retail outlets of Lucknow. Significance value= 0.000 ($p<0.05$). $B=0.374$, Exponent (B) = 1.45 means for every one unit increase in TSNL the odds of employee's Affective commitment falling into higher category increases by 1.45 times. Hence, null hypothesis 2 is rejected.

Ho.2: Transactional Leadership styles does not have any effect on employee affective commitment, in organized retail sector in Lucknow region.

Passive Avoidant Leadership style (PALS) has a significant positive effect on the Affective Commitment (AC) of employees of retail outlets of Lucknow. PALS is significant at significance level of 95 per cent ($p < 0.000$). $B=0.441$, Exponent (B) = 1.55 means with every one unit increase in PALS the odds of employee's Affective commitment falling into higher

category increases by 1.55 times. Hence null hypothesis 3 is rejected.

Ho.3: Passive Avoidant Leadership style does not have any effect on employee affective commitment, in organized retail sector in Lucknow region.

8. CONCLUSION

Considering the above analysis, we can conclude that all three leadership styles, Transformational, Transactional and Passive Avoidant Leadership style has a significant positive effect on the employee's Affective commitment in the retail outlets of Lucknow. Transformational Leadership style indicates to have a greater effect with log odds of 0.658 followed by Passive Avoidant leadership style with odds of 0.441 closely followed by the Transactional Leadership style with odds of 0.374.

Among the three leadership styles the Transformational leadership style has the highest effect on the odds of Affective commitment to fall into higher category. Hence, its recommended that Transformational Leadership styles should be practiced in reference to Affective commitment, In other words, Transformational leadership style is most suitable to enhance the Affective Commitment of employees in the retail sector of Lucknow region. Passive Avoidant Leadership style followed by Transactional Leadership style can also be practiced with caution, not to overdo it, for which proper training should be provided to the managers.

This study empirically analyzed the effect of leadership styles on employee affective commitment, giving a statistically tested

regression model to assess the Likert scale data which can be used by future researchers.

It also contributes to the organizational behavior study and Leadership studies research literature on retail sector of Lucknow, India.

9. RECOMMENDATIONS FOR FUTURE RESEARCHERS:

1. Due to geographical limitations this study is limited to the Lucknow city of India. Same model can be put to test in other cities of India as well and results can be compared.

2. Same model can be put to test the effects of other leadership styles. Also, the effects on other employee outcome can be measured using the same baseline regression model.

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