

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

By

Riffat un Nisa Awan¹, Ghazala Noureen², Shamsa Aziz³ & Hamid Hassan⁴

¹Assistant Professor, University of Sargodha

²Assistant Professor, Lahore College for Women University.

³Assistant Professor, International Islamic University, Islamabad.

⁴Lecturer, Federal College of Education, Islamabad.

Abstract

This study was designed to test the path-goal theory of leadership in an educational setting. It investigated the relationship among leadership behavior of degree college principals, and faculty job satisfaction, acceptance of leader and job expectancies moderated by locus of control. The questionnaire comprised of a combination of instruments measuring directive and participative leadership styles, locus of control and all three subordinate outcomes along with two scales for measuring role ambiguity and stress of the principals for controlling their affects. Responses were received from 445 lecturers and 138 principals of respective colleges. MANCOVA was used to know the moderating affect of locus of control on the relationship of leadership style and subordinates' outcomes controlling the effect of role ambiguity and stress of the principals. Findings indicated that the locus of control differentially affected subordinate outcomes relationships with directive and participative leader behaviors. Three out of four hypotheses were according to the predictions of theory. All the results of the study were discussed in relation to the path-goal theory.

Introduction

Path-goal Theory of leadership is a situational theory based on the assumption that effective leader behavior has a positive impact on subordinate job satisfaction (House, 1971). House (1996) says that this theory assess the relationship between the Ohio State measures of leader consideration and leader initiating structure and follower perception of Path-goal relationship (instrumentality and expectations). House (1971) proposes that the leader can affect the performance, satisfaction, and motivation of a group. This theory argues that people are satisfied with their work and will work hard if they believe their work will lead to things that are highly valued. The path-goal theory relates different types of leadership behavior to differing attitudes and behavioral responses of subordinates with different ability perceptions, need for achievement and locus of control. Leaders will be successful when subordinates understand that their rewards, both intrinsic and extrinsic, depend on effective performance. "They believe that the leader has the power to deliver the rewards—by opening and clarifying the "paths" to the desired "goals." Since different subordinates respond to different stimuli, the effective leader chooses his/her tools wisely" (Bess & Goldman 2001, p. 436). This theory

657

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

states that different environmental variables and personal characteristics moderate the leader member relations. Among the personality variables that have been examined as possible sources of influence on the leader's use of rewards and punishments are the supervisor's locus of control, authoritarianism, and self-confidence (Podsakoff, 1982).

Locus of control refers to the perceived source of influence over our behavior and it is the perceived control that one has over the events in his or her life. "The locus of control notion states that work behavior can be explained whether employees perceive outcomes as controlled internally or externally" (Wheatley, Armstrong, and Maddox, 1989, 13). This factor represents beliefs about causes and effects in one's life (Rotter 1966). Individuals with an internal LC perceive greater control, while externals perceive that fate or powerful others exert great influence on such events (Brown & Treviño 2006). At one extreme is the person who believes that the location of influence over outcomes is within one's own behaviors while at the other extreme is the person who believes that the locus of influence over outcomes is outside one's control.

Internal locus of control is the degree to which individuals are controlled by their internal motives, habits, and values, rather than by external forces. Internals believe that they can affect events and outcomes and externals feel powerless and unable to influence events no matter what they do. An individual, whose locus of control is external, believes that such outside forces as fate, luck, or chance are the principal determinants of behavior (Rotter 1966). Organ & Bateman (1986) discuss various causes of locus of control. The simplest explanation would be that internals and externals are rather accurate in their perceptions, that internals are simply products of an environment in which their behavior has actually determined their fates and that externals have experienced futility in trying to determine their own lots. It certainly seems plausible that such individuals actually do exert less control over their fates.

Locus of control (LOC), internal or external, has been widely studied since the mid-1960s as a personal antecedent of consequence to a leader's and to a manager's behavior. To measure LOC, Rotter (1966) developed and evaluated a self-report assessment instrument, the I-E Scale, which discriminates between persons who are controlled by internal forces and those who are controlled by outside influences.

Locus of control is an important personal characteristic of Path goal model and many researchers have tried to find out its moderating effect on leader-member relations (Algattan, 1983; Awan, 2003; Awan, Zaidi & Bigger 2008; Goupil, 1985; Howell & Avolio 1993; Leonard, 1992; Podsakoff et al. 1984). Algattan, (1983) in his dissertation investigated the relationships between leader behavior and subordinates' satisfaction (with job and supervision) and performance as moderated by subordinates' tasks, growth need strength, and locus of control. If the subordinates' locus of control was external, the scope of their tasks and the strength of their need for growth increased the extent to which both participative and directive leadership contributed to their satisfaction and performance. But if the subordinates' locus of control was internal, task-oriented leadership, as such, was of more importance to their satisfaction and performance.

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

In Podsakoff and his colleagues study (1984) locus of control functioned as positive moderators of the contingent punishment-work satisfaction relationship. Additional analyses of these moderating effects indicated that the CP-satisfaction with work relationship was stronger for subordinates who were high on locus of control (more external), than for subordinates who were lower on locus of control, or perceived less role ambiguity, respectively and locus of control served as a positive moderator of this relationship. In a simulated industrial setting in which 40 male subjects were preselected on the basis of their locus of control scores, Goodstadt and Hjelle (cited in Podsakoff, 1982) found that internals and externals did not differ in their use of either rewards or the total amount of formally delegated bases of power. Internals, however, used significantly more personal power and significantly less punishment than did externals.

The purpose of Goupil's (1985) research was to test selected variables of the Path-Goal Theory. The intent was to investigate whether differences in subordinate's locus of control, under routine and non-routine task conditions, had a systematic effect on the subordinate's acceptance of directive and supportive leader behavior. The four experimental conditions represented by the scenarios were routine task/directive leader, routine task/supportive leader, non-routine task/directive leader, non-routine task/supportive leader. This study provided limited support for the Path-Goal Theory. It was found that in routine tasks both internals and externals had greater satisfaction with supportive leaders than with directive leaders as predicted by the theory. The prediction that directive leader behavior would be preferred by both internals and externals when performing non-routine tasks was not supported. Garbato, (2010) also tells that Internal locus of control and a democratic leadership style were associated with greater job satisfaction.

The studies conducted by Leonard, (1992) and Ross, (1986) were designed to test the path-goal theory of leadership in an educational setting. It was concluded that joint moderators of leadership behaviors, rather than singular ones, prove more useful in predicting teacher job satisfaction. The effects of initiating structure on job satisfaction were not moderated either by role ambiguity or locus of control singularly as hypothesized, but together role ambiguity and locus of control do moderate the relationship between initiating structure and job satisfaction. Leonard, (1992) results indicate that teachers with an internal locus of control orientation, supervised by principals who exhibit high tolerance of freedom, experience significantly higher levels of general, intrinsic, and extrinsic job satisfaction than teachers with an external locus of control orientation under the same conditions.

Research on path-goal theory has been met with mixed results. Some studies support House's theories while others do not. Path-goal theory has also been criticized for its conceptual ambiguity. Dessler (1997) asserts that path-goal leadership theory in general has received minimal support in part possibly because of the difficulty of measuring concepts such as "path." Yukl (1989) suggests that methodological limitations raise doubts about the findings. Because almost all the studies used only subordinate questionnaires to measure leader behavior and considered only a few aspects of the model at a time, the theory has not been

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

adequately tested. Based on these critiques, it has been suggested that there continues to be a need for more and better research to adequately test the theory.

Research Question

What is the relationship between locus of control and subordinates' outcomes, who work under directive and participative leaders, holding constant the effect of principals' role ambiguity and stress?

Method

The population of the study consisted of Principals and teaching staff of all male and female degree colleges from the province of the Punjab. Sample size of the study comprised of 138 Government Degree colleges and 445 teachers (lecturers, Assistant professors, Associate professors, professors) teaching in these colleges.

The questionnaire for this study consisted of a combination of instruments. Questionnaires related to each of the independent, moderating, and dependent variables, were combined and translated into Urdu. For measuring leadership behavior House and Dessler (1974) factor analyzed the LBDQ-XII dimensions (Initiating Structure and Consideration) and obtained items for three leadership scales: Directive, Supportive, and Participative. House and Dessler (1974) then added several of their own items to complete the participative scale. Internal consistencies for both the LBDQ-XII and House and Dessler's items on Leader Behaviors are sufficiently high (.75 or higher usually reported). The Job Expectancies scale developed by House and Dessler (1974) was used for this study to measure Job Expectancy I and Expectancy II. Both of these scales were found to have adequate reliability. Kuder-Richardson scores were in the range of .84 to .88. The questions used to measure subordinates' Role Ambiguity in this study were from Rizzo, House, and Lirtzman's (1970) research entitled "Role Conflict and Ambiguity in Complex organizations". The Job Descriptive Index (JDI) and the Job in General Scale (JGI) (Balzer, et al. 1997) were utilized to measure Job Satisfaction. The authors of the JDI reported split half-internal consistency reliability of the five JDI scales ranging from .80 to .88, across six samples. All these instruments had been developed specifically to test the path-goal theory and had been used by many researchers (Awan, 2003; Awan, Zaidi & Bigger, 2008; Awan, et al. 2011; Alghathan, 1983; Indivic, 1985; Romeo, 1992; Schriesheim, & Glinow, 1977) and found reliable.

For subordinate characteristics the researcher herself constructed questionnaire entitled "Subordinate Personal Characteristics Scale", and locus of control was the part of this instrument which was used for this study. The items were constructed to measure internal and external location of orientation. For measuring dependent variable 'acceptance of leader' a scale was developed by the researcher comprising ten items. After the initial construction of the research tool, a pilot study was conducted using a total of 39 college teachers as the sample. The reliability of measuring instrument was calculated using chronback alpha on computer using SPSS which ranged from 0.70 to 0.91.

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

Results

ANCOVA and MANCOVA were used to test the null hypotheses after controlling the effect of confounding variables i.e. stress and role ambiguity on the part of principals.

H_{o1} . There is no relationship between locus of control and subordinates' acceptance of leader when the leader behavior is directive, holding constant the effect of principals' stress.

Table 1. N, Mean, Adjusted Mean, Standard Deviation, and ANCOVA for Directive Leadership Style, Acceptance of Leader and Locus of Control

Sources of variance	<i>Df</i>	<i>F</i>	<i>P</i>	η^2
Between groups(adjusted)	2	62.72	.000	.221
Within groups	441			
Total	445			

	<i>N</i>	Adjusted Mean	Mean	<i>SD</i>
Directive -o	62	24.461	24.47	5.22
Directive -low	362	29.472	29.47	4.01
Directive -high	21	21.074	21.05	8.22

The results of a univariate analysis of covariance ANCOVA are presented in the above table. Significant differences were found among the three dimensions of directive leadership style on the dependent measure of acceptance of leader, ANCOVA was significant, $F(2,445) = 62.72$, $P = .000$. It means that significant differences were found among the three dimensions of directive leadership style on the dependent variable, acceptance of leader. The strength of relationship was strong because 22% variance in the dependent variable was due to leadership behavior.

Table 2. LSD test of multiple comparisons

DV	Comparison	Mean difference (I-J)	Sig.
Acceptance of leader	High Directive Vs low Directive	-8.398	.000

Follows up tests to the ANCOVA were also conducted to evaluate pair wise differences among the three adjusted means but only the difference between high directive and low directive were presented here. After this test the researcher concluded that high directive leadership had inverse relationship with acceptance of leader when the subordinates had internal locus of control. It could be stated inversely as directive leadership had positive relationship with acceptance of leader when the subordinates had external locus of control.

H_{o2} . There is no relationship between locus of control and subordinates' job expectancies when leaders are participative, holding constant the effect of principals' stress and role ambiguity.

Table 3. N, Mean, Adjusted Mean, SD and MANCOVA for Participative Leadership Style, Job Expectancies and Locus of Control

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

Multivariate Results					
Test	Λ value	<i>F</i> -Ratio	Hypothesis <i>df</i>	<i>P</i>	η -Square
Wilks' lambda	.865	16.568	4.00	.000	.070
Univariate <i>F</i> - Tests					
DVs		<i>F</i> -Ratio	<i>df</i>	<i>P</i>	η -Square
Expectancy I		17.688	(2,444)	.000	.074
Expectancy II		33.441	(2, 444)	.000	.132
		<i>N</i>	Adjusted Mean	Mean	<i>SD</i>
Expectancy I	Participative-o	111	7.111	6.95	2.42
	Participative –low	220	6.162	6.13	2.36
	Participative –high	114	8.115	9.36	3.98
Expectancy I	Participative-o	111	8.514	8.49	2.64
	Participative –low	220	7.368	7.37	2.75
	Participative –high	114	10.192	10.22	3.79

MANCOVA was conducted to determine the effect of the participative leadership styles on the job expectancies with reference to the subordinates' locus of control, holding constant the effect of principals role ambiguity and stress. Significant differences were found among the directive leadership styles on the dependent measures, Wilks' Lambda $\Lambda = .865$, $F(4,878)=16.568$, $P= .000$, was significant.

Analysis of covariance (ANCOVA) on the dependent variables were conducted as follow up tests. The ANCOVA on Expectancy I, $F(2,444) = 17.688$, $P= .000$, and Expectancy II $F(2,444) = 33.441$, $P= .000$ was significant. It means that significant differences were found among the three dimensions of participative leadership style on the dependent measure of Expectancy I and Expectancy II. To see which leadership style is more effective LSD post hoc test of multiple comparison was conducted.

Table 4. LSD Post Hoc Test of Multiple Comparison

DV	Comparison	Mean difference (I-J)	Sig.
Expectancy I	High Participative Vs low Participative	1.953	.000
Expectancy II	High Participative Vs low Participative	2.824	.000

After this test it was concluded that high participative leadership have positive effect on subordinates' job expectancies, which had internal locus of control.

H_{o3} . There is no relationship between participative leader behavior and subordinates' job satisfaction, who have internal locus of control, holding constant the effect of principals' role ambiguity and stress.

Table 5. N, Mean, Adjusted Mean, SD and MANCOVA for Participative Leadership

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

Style and Job Satisfaction when subordinates have Internal Locus of Control

Multivariate Results					
Test	Λ value	<i>F</i> -Ratio	Hypothesis <i>df</i>	<i>P</i>	η -Square
Wilks' lambda	.958	1.583	12.00	.000	.041
Univariate <i>F</i> - Tests					
DVs		<i>F</i> -Ratio	<i>df</i>	<i>P</i>	η -Square
Work		6.534	(2,443)	.002	.029
Pay		2.385	(2,443)	.093	.011
Promotion		.914	(2,443)	.401	.004
Supervision		14.787	(2,443)	.000	.063
Coworker		6.464	(2,443)	.002	.029
Job in general		4.738	(2,443)	.009	.021

		<i>N</i>	Adjusted Mean	Mean	<i>SD</i>
Work	participative –low	219	30.201	30.20	4.89
	participative –high	114	27.585	27.61	8.65
Supervision	participative –low	219	32.159	32.16	10.13
	participative –high	114	25.092	25.11	12.60
Coworker	participative –low	219	27.945	27.94	5.88
	participative –high	114	25.534	25.46	8.47
Job in general	participative –low	219	29.437	29.44	5.14
	participative –high	114	27.382	27.37	7.18

A multivariate analysis of covariance (MANCOVA) was conducted to determine the effect of participative leadership styles on the six dependent variables when the subordinates have internal locus of control, holding constant the effect of principals' stress and role ambiguity. Significant differences were found among the participative leadership styles on the dependent measures, Wilks' Lambda $\Lambda = .902, F(12,866)=3.814, P= .000$, was significant.

Analysis of covariance (ANCOVA) on each dependent variable was conducted as follow up tests to the MANCOVA. The ANCOVA on pay and promotion was non-significant, It means that significant differences were found among the three participative leadership styles on the dependent measure of work, supervision, coworker and job in general.

Table 6. LSD Post Hoc Test of Multiple Comparison

DV	Comparison	Mean difference (I-J)	Sig.
Work	High participative Vs low participative	-2.616	.000
Supervision	High participative Vs low participative	-7.067	.000
Coworker	High participative Vs low participative	-2.411	.003
Job in general	High participative Vs low participative	-2.055	.002

Follow up tests to the ANCOVA to evaluate pair wise differences among three adjusted means were also conducted, After this test the researcher concluded that high participative

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

leadership contributed negatively in job satisfaction with supervision, coworker and job in general.

H₀₄. There is no relationship between directive leader behavior and subordinates' job satisfaction, who have external locus of control, holding constant the effect of principals' role ambiguity and stress.

Table 7. N, Mean, Adjusted Mean, SD and MANCOVA for Directive Leadership Style and Job Satisfaction with Internal Locus of Control

Multivariate Results					
Test	<i>Λ</i> value	<i>F</i> -Ratio	Hypothesis <i>df</i>	<i>P</i>	η-Square
Wilks' lambda	.958	1.583	12.00	.091	.021
Univariate <i>F</i> - Tests					
DVs		<i>F</i> -Ratio	<i>df</i>	<i>P</i>	η-Square
Work		1.766	(2,443)	.172	.008
Pay		1.030	(2,443)	.358	.005
Promotion		2.212	(2,443)	.111	.010
Supervision		4.299	(2,443)	.014	.019
Coworker		1.203	(2,443)	.301	.005
Job in general		3.731	(2,443)	.025	.017
		<i>N</i>	Adjusted Mean	Mean	<i>SD</i>
Supervision	Directive –low	360	30.569	30.57	11.45
	Directive -high	21	26.132	26.10	10.27
Job in general	Directive –low	360	28.945	28.94	5.66
	Directive -high	21	25.418	25.38	9.43

A multivariate analysis of covariance (MANCOVA) was conducted to determine the effect of directive leadership styles on the six dependent variables when the subordinates have internal locus of control, holding constant the effect of principals' stress and role ambiguity. Significant differences were not found among the directive leadership styles on the dependent measures, Wilks' Lambda $\Lambda = .958, F(12,866)=1.583, P= .091$, was significant.

The ANCOVA on supervision, and job in general was significant, It means that significant differences were found among the three directive leadership styles on the dependent measure of supervision, and job in general.

Table 8. LSD Post Hoc Test of Multiple Comparisons

DV	Comparisons	Mean difference (I-J)	Sig.
----	-------------	-----------------------	------

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

Supervision	High directive Vs low directive	-4.437	.088
Job in general	High directive Vs low directive	-3.527	.007

Follow up tests to the ANCOVA to evaluate pair wise differences among three adjusted means were also conducted, After this test the researcher concluded that high directive leadership contributed negatively in job satisfaction with supervision and job in general but only the mean difference for job in general was significant.

Conclusions

On the bases of findings of the study, following conclusions were drawn:

Results supported the theory

1. Directive leadership had positive relationship with acceptance of leader when the subordinates had external locus of control. This result confirms path-goal prediction, which states that internals always prefer participative leaders, and externals prefer directive leaders.
2. High participative leadership had positive effect on subordinates' job expectancies, which had internal locus of control. This result is consistent with path-goal theory, which states that people who have internal locus of control are more motivated when their leader's behavior is participative.
3. High directive leadership contributed negatively in job satisfaction with supervision and job in general. This finding confirms the path-goal theory that directive leadership has positive relationship with satisfaction when the subordinates have external locus of control and has negative relationship with satisfaction when the subordinates have internal locus of control.

Result not supporting path-goal theory

High participative leadership contributed negatively in job satisfaction with supervision, coworker and job in general. This finding is contradictory to the path-goal theory that participative leadership has positive relationship with satisfaction when the subordinates have internal locus of control.

Implications of findings for path-goal theory

According to House & Mitchell (1974) path-goal theory asserts that the subordinate's score on a measure called locus of control moderates the relationship between participative leadership style and subordinate satisfaction. The locus of control measure reflects the degree to which an individual sees the environment as systematically responding to his or her behavior. Mitchell's findings (cited in House & Mitchell 1974) suggest that internals were more satisfied with a participative and achievement-oriented leadership style and externals were more satisfied with a directive style. This study supports Mitchell's findings. According to the findings of this study, externals had greater acceptance of leader when the leader was

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

directive, and high participative leadership had positive effect on subordinates' job expectancies, who had internal locus of control. These results confirm path-goal prediction, which states that internals always prefer participative leader, and externals prefer directive leader. High directive leadership contributed negatively in job satisfaction with supervision and job in general. This finding confirms the path-goal theory that directive leadership has positive relationship with satisfaction when the subordinates have external locus of control and has negative relationship with satisfaction when the subordinates have internal locus of control. The above findings support the results of many studies such as Algattan (1983), Garbato (2010), Leonard (1992).

References

- Algattan, A.A. (1983). The path-goal theory of leadership: an empirical and longitudinal analysis, Arizona State University, *Dissertation Abstract International*. Vol. 44-01A.
- Awan, R.N., (2003). *A Study of Relationship among Leadership Behavior of College Principals and their Subordinates' Job Satisfaction and Acceptance of Leader: A Path-Goal Approach*. Unpublished Doctoral Dissertation, University of the Punjab Lahore.
- Awan, R.N., Zaidi, R.A & Bigger, S. (2008). Relationships between Higher Education Leaders and Subordinates in Pakistan: A Path-Goal Approach. *Bulletin of Education and Research*. 30(2). 29-44
- Awan, R.N., Zaidi. N.R., Naz, A., & Noureen, G. (2011). Task Structure as Moderator of College Principals' Leadership Behavior and their Subordinates' Outcomes. *International Education Studies*.vol 4 (1) 134-143
- Bess, J. L. and Goldman, P. (2001). Leadership ambiguity in universities and K–12 schools and the limits of contemporary leadership theory *The Leadership Quarterly* 1 419–450
- Balzer, W. K., Kihm, J. A., Smith, P. C., Irwin, J. L., Bachiochi, P. D., Robie, C., Sinar, E. F., & Parra, L. F. (1997). *User's manual for the Job Descriptive Index (JDI; 1997 Revision) and the Job in General (JIG) Scales*. Bowling Green, OH: Bowling Green State University.
- Brown, M.E. and Treviño, L. K. (2006). Ethical leadership: A review and future directions *The Leadership Quarterly* 17, 595-616
- Dessler, G. (1997). *Management: leading people and organizations in the 21st Century*, NJ: PrenticeHall.
- Garbato, M. C. (2010). *The effects of leader sex, leadership style, and locus of control on employee satisfaction*. Unpublished Masters Thesis, California State University USA.
- Goupil, N. M. (1985). A test of the path-goal theory: effect of task structure and locus of control on leader acceptance. The University Of Wisconsin – Madison, *Dissertation Abstract International*, Vol. 47-01a.

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

- House R. J. (1971). A path goal theory of leader effectiveness, *Administrative Science Quarterly*, 16 (3), 321-338.
- House, R. J. & Dessler, G. (1974). Path goal theory of leadership: Some post hoc and a priori tests. In *Contingency approaches to leadership*, JG Hunt and L.L. Larson (Eds.), Carbondale, IL: Southern Illinois University.
- House, R. J. & Mitchell, T.R. (1974). Path goal theory of leadership in Fred Luthans (ed.) *Contemporary Readings in Organizational Behavior*. New York: McGraw Hill.
- House, R. J., (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory, *Leadership Quarterly*, 7(3), 323-325.
- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78, 891-902.
- Leonard, E. F. (1992). An analysis of managerial leadership practices and substitutes for leadership in higher education administration Unpublished Doctoral Dissertation UNIVERSITY OF MISSOURI - Kansas City; *Dissertation Abstract International*.vol. 54-10.
- Organ, D. W. & Bateman, T. (1986). *Organizational behavior: An applied psychological approach*. Illinois: IRWIN Homeland.
- Podsakoff, P.M. (1982) Determinants of a Supervisor's Use of Rewards and Punishments: A Literature Review and Suggestions for Further Research. *Organizational Behavior and Human Performance* 29, 58—83
- Podsakoff, P.M., Todor, W.D., Grover, R.A. and Huber, V. L. (1984) Situational Moderators of Leader Reward and Punishment Behaviors: Fact or Fiction? *Organizational Behavior and Human Performance* 34, 21-63
- Rizzo, J. R., R. J. House, and S. E. Lirtzman. (1970). Role Conflict and Ambiguity in Complex Organizations, *Administrative Science Quarterly*, 15, 150-163.
- Romeo, C. C. (1992). *A test of path- goal theory: the effects of leadership and faculty satisfaction in public baccalaureate nursing programs*. Unpublished Doctoral Dissertation, University of Maryland College Park.
- Ross, B. R. (1986). The interaction effect of leadership behavior and situation variable on teacher job satisfaction. Oklahoma State University. *Dissertation Abstract International*.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80, Whole No. 609.
- Schriesheim, C and Glinow, M.A. (1977). The Path-Goal Theory of Leadership: A Theoretical and Empirical Analysis. *The Academy of Management Journal*, 20(3), 398-405

Locus of Control as Moderator of Relationship between Leadership Behaviors of Principals and their faculty outcomes: A Path-Goal Approach

Wheatley, W.J., Armstrong, T.R. and Maddox, N. (1989). The impact of leader and team member characteristics upon simulation performance: A start-up study *Developments in Business Simulation & Experiential Exercises*, 16,

Yukl, G.A. (1989). *Leadership in organizations*. 2nd ed. Englewood Cliffs, NJ: PRENTICE-HALL, INC