

Locus of Control, Machiavellianism, and Managerial Job Performance

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ABSTRACT. In this study, we examined the moderating effect of locus of control on the relationship between Machiavellianism and job performance of store managers in a retail setting. Our results indicated a significant moderating effect for managers who perceive that they have an external control orientation but not for managers with an internal control orientation.

AS A PERSONALITY DIMENSION, Machiavellianism has been used to categorize individuals in terms of a belief that persuasive, manipulative behaviors will help to achieve personal goals. People holding this viewpoint will extol the use of guile and deceit to reach their objectives (Machiavelli, 1513/1952; Machiavelli, 1513/1965). Although Machiavelli did not recommend lying, he assumed its necessity in an imperfect world. To achieve one's objectives, an individual can sacrifice truthfulness, and, therefore, ethics, can be sacrificed. Machiavellian individuals should not be viewed as consistently untruthful or consistently unethical but rather as individuals who are willing to sacrifice ethics, if necessary, to attain their objectives.

Interpretation of books by Machiavelli have culminated in the incorporation into our vocabulary of the term *Machiavellianism*, which has generally been perceived in a negative manner. Although Machiavelli provided advice for 16th-century Italian political leaders, his views should be applicable to business executives who are thrust into positions to run profitable operations in the 20th century. Calhoun's (1969) thoughts best illustrate this point:

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A definition of the twentieth century Machiavellian administrator is one who employs aggressive, manipulative, exploiting, and devious moves in order to achieve personal and organizational objectives. These moves are undertaken according to perceived feasibility with secondary consideration (what is necessary under the circumstances) to the feelings, needs and/or "rights" of others. Not that Machiavellianism is "right" or even particularly "bright," but it exists in today's leadership and needs to be recognized as such. (p. 211)

Managers who adopt manipulative behavior patterns should be more effective (run more profitable operations) than those who are not as adept in developing these behavior patterns.

From the time that Christie and Geis (1970) published their book on Machiavellianism, this topic has been widely researched, and although it has been studied in a variety of business settings (Chonko, 1982a, 1982b; Gable & Topol, 1988; Hollon, 1983; Hunt & Chonko, 1984; Okanes & Murray, 1980; Topol & Gable, 1988), few researchers have investigated the relationship between Machiavellianism and job performance. Turnbull (1976), Hunt and Chonko (1984), and Gable and Topol (1988) studied the relationships between Machiavellianism and surrogate indicators of job performance (e.g., job title and annual income). Gable and Topol (1991) investigated the relationship between Machiavellianism and job performance, as measured by gross margin percentage, sales per square foot, and inventory turnover. Except for a significant relationship between Machiavellianism and gross margin percentage for male managers, no other relationships were observed for either all managers, male managers, or female managers.

However, using data on the same store managers, Gable, Hollon, and Dangelo (1992) determined the moderating effect of perceived initiation of structure by the managerial superior on the relationship between Machiavellianism and job performance. Their results indicated a significant moderating effect for managers who perceive their supervisors initiating a loose structure for the work environment. There were differences for male store managers in the three measures of job performance—gross margin percentage, sales per square foot, and inventory turnover. No moderating effect was found for the highly structured group.

Researchers have investigated the relationship between locus of control (LOC) and Machiavellianism. In a study of sales managers, Comer (1985) found a relationship between Machiavellianism and LOC. High external LOC was associated with high Machiavellian scores, confirming the results of earlier research by Solar and Bruehl (1971), who examined this relationship with a sample of college students. In another study, Prociuk and Breen (1976) reported a significant relationship between Machiavellianism and LOC for male but not for female students.

Mudrack (1989) conducted a meta-analytic review of 20 studies determining the relationship between Machiavellianism and LOC. He found

a positive association between Machiavellianism and external LOC. Gable, Hollon, and Dangelo's research (1990) supported this result.

Very little research has been undertaken to identify and operationalize the impact of self-perception that can be conducive to the usage of Machiavellianism (Nelson & Gilbertson, 1991). One aspect of self-perception is whether or not individuals feel that they have any control over their environment. These expectations vary from person to person in relation to their backgrounds. In this regard, Mudrack (1989) wrote:

It may very well be that in a world governed by forces outside of the individual's sphere of influence, outcomes would not necessarily be seen as immediately contingent upon personal characteristics, abilities or efforts. The use of manipulation, deception or initiation tactics may thus reflect an attempt on the part of the Machiavellian to assert some influence over a hostile environment that subverts the efficacy of more internally oriented approaches, such as hard work.

There is reason to believe that locus of control can exert a moderating effect in the relationship between Machiavellianism and job performance. Specifically, the linkage between these two variables should be heightened if individuals perceive themselves as not having control over their own environment (i.e., they feel controlled by external forces). Externally oriented individuals may tend to exhibit Machiavellian behavior because it allows them to gain some control over their own environment. This would be especially true in situations where there is a perception of a very high degree of external control in which Machiavellianism can exert a countervailing force. Specifically, we investigated the following two hypotheses:

1. Managers with a high Machiavellian orientation will achieve higher job performance than those with a low Machiavellian orientation when they perceive themselves as being externally controlled.
2. Machiavellianism will be unrelated to performance when managers perceive themselves as being internally controlled.

Since the mid 1960s, the locus of control construct (Rotter, 1966) has generated considerable research in the work setting. Individuals who are categorized as internal believe they can control their own outcomes; those categorized as external, on the other hand, feel that much of what happens to them is controlled by external forces.

Locus of control has been widely researched (e.g., Bigoness, Keef, & DuBose, 1988; Freeman & Miller, 1989; Hollenbeck & Klein, 1987; Lefcourt, 1984; Taylor & Popma, 1990), yet few studies have addressed the relationship between LOC and actual job performance. O'Brien (1984) suggested that LOC can significantly predict job performance. No studies in which performance has been addressed (Anderson, 1977; Andrisani & Nestel, 1976; Dailey, 1979; Freeman & Miller, 1989; McIntire & Levine, 1991) have been related to managerial job performance. Because a preponderance of litera-

ture reveals no relationship, we also investigated the following third hypothesis:

3. Performance will be unrelated to managers' perceptions of themselves as being externally or internally controlled.

Method

Data Collection

As part of a research undertaking for a 78-store specialty chain, data were collected by a self-administered questionnaire completed by all managers who had at least 1 year of tenure in their positions. In addition, information was secured from company records about individual store performance. Sixteen managers were not included because they did not have the prescribed job tenure, and 2 managers declined to participate. Twelve female store managers who had the requisite job tenure were not included in the study because the small sample was considered inappropriate for statistical analysis. Therefore, 48 male store managers were included in the present research.

Because this is a regional chain, external conditions, for the most part, are constant for all stores. Although many functions of the store (e.g., advertising) are handled centrally, each store manager has substantial discretion and can influence both sales per square foot and gross margin return on inventory for the store. The manager is in charge of all aspects of personnel management in the store, in determining the number of people needed and in hiring sales clerks and cashiers. If these people are poor performers, both sales and gross margin return for a store will suffer.

Store managers are responsible for reordering merchandise for a store, maintaining adequate inventory levels, and providing customer service. Since this chain is regional, economic conditions and other environmental factors should affect all stores relatively equally. Good customer service can yield better sales, higher gross margin percentages, and greater inventory turnover. Because store managers train employees, they can influence customer service. They are also in a position to influence the control of theft (internal and external). Thus, differences in store performance should be attributable to store managers.

Measures

The Christie and Geis (1970) Mach IV Scale was used to measure Machiavellianism. The Mach IV Scale, a 20-item Likert-type instrument, measures the Machiavellian orientation of individuals by using statements addressing tactics, views, and morality. Following the practice of Christie and Geis (1970),

we added a constant of 20 to all scores so that scores could range from 40–160, with a theoretical neutral point of 100. Christie and Geis reported a .79 split-half reliability coefficient for their scale.

Locus of control was measured with the Internal–External Locus of Control Scale developed by Rotter (1966), which has 29 forced-choice items, 6 of which are fillers. The remaining 23 items determine the degree to which people perceive that the consequences of their actions are based on their own behavior (internal control) or are under the control of the environment (external control). Rotter reported internal consistency estimates ranging from .65 to .79. In Rotter's scoring procedure, a high score denotes an external control orientation. In the present research, the scoring procedure was reversed, so that a high score indicated an individual with an internal LOC. The Rotter scale has been widely used in many settings (Batlis, 1980; Bigoness et al., 1988; Bishop & Solomon, 1989; Freeman & Miller, 1989; Taylor & Popma, 1990).

A common measure used to assess managerial job performance in the retail setting is the gross margin return on inventory (GMROI), which incorporates two important retailing variables together to provide a single measure of retailing efficiency (Berman & Evans, 1989, pp. 402–403; Lusch, Dunne, & Gable, 1990, p. 385; Sweeney, 1973). These variables are the gross margin percentage, expressed as a percentage of sales, and the annual turnover rate of the inventory. The single measure of efficiency is the rate of return derived from the investment in the inventory. It is computed in the following way: $(\text{Gross Margin}/\text{Net Sales}) (\text{Net Sales}/\text{Average Inventory at Cost}) = (\text{Gross Margin}/\text{Average Inventory at Cost})$.

Thus, if a particular store has a gross margin of 40% and an annual turnover rate of 5, the GMROI is 200. That is, for each dollar invested in inventory, the store obtains \$2.00 in gross margin annually. Two principal decision-making criteria in merchandise management—gross margin percentage and inventory turnover—are used as an operational measure to evaluate the performance of store managers who should have a major impact in controlling these factors.

Sales per square foot is a unitized measure that permits an easy comparison of stores. Sales per square foot is determined by dividing dollar sales for a year by the square footage of the store. This measure appraises the productivity of space in a store and assumes that the use of selling space is a sound predictor of a manager's job performance.

Research Analysis

The research analysis for the moderator variable effect was accomplished by a median split classification of the store managers on the basis of their scores on the LOC variable. Those who were at the median level or higher were

classified as internally oriented; those below the median score were categorized as externally oriented. Within each classification, a Pearson correlation coefficient was used to ascertain the relationship of the Machiavellian orientation of managers with each of the two measures of job performance. To determine the relationship between LOC and performance, we calculated Pearson correlation coefficients.

Results

Table 1 contains the mean scores, standard deviations, ranges, and Cronbach alpha reliability coefficients, where appropriate, for all the scales used in this research. The data in Table 2 indicate that there was no relationship between LOC and either of the measures of managerial job performance, and that Machiavellianism was significantly related to GMROI but not to sales per square foot.

For managers with an external control orientation, there was a significant relationship between Machiavellianism and the two measures of job performance. Machiavellianism for managers considered internally oriented was unrelated to either the GMROI or sales per square foot (Table 3). Introducing the moderating variable, LOC, increased the relationship between Machiavellianism and job performance. For the GMROI, the correlation increased from .293 to .563, or the explanatory power rose from 8.6% to 31.7%. For sales per square foot, the correlation increased from .266 to .460, or the explanatory power grew from 7.1% to 21.2%.

Discussion

Although the findings of this study indicated that there is no relationship between LOC and managerial job performance, LOC exerted a moderating effect in the relationship between Machiavellianism and managerial job performance. Managers high in Machiavellian traits who also perceive them-

TABLE 1
Locus of Control, Machiavellianism, and Job Performance Scores ($N = 48$)

Measure	Mean score	SD	Range	Cronbach's alpha
Locus of control	13.6	2.7	8-19	.68
Machiavellianism	85.5	12.4	62-109	.79
Performance scores				
GMROI	173.8	62.6	43.4-397.4	—
Sales per square foot	343.3	62.0	88-587	—

TABLE 2
Pearson Correlations ($N = 48$)

Measure	Measure	<i>r</i>	<i>p</i>
Locus of control ^a	Machiavellianism	-.381	.008
Locus of control	GMROI	.026	.863
Locus of control	Sales per square foot	.041	.783
Machiavellianism	GMROI	.293	.044
Machiavellianism ^b	Sales per square foot	.266	.068

^aAppeared in Gable, Hollon, and Dangelo (1990). ^bAppeared in Gable and Topol (1991).

TABLE 3
Pearson Correlations Classified by Locus of Control

Measure	Measure	<i>r</i>	<i>p</i>
<i>External control group (n = 21)</i>			
Machiavellianism	GMROI	.563	.004
Machiavellianism	Sales per square foot	.460	.018
<i>Internal control group (n = 27)</i>			
Machiavellianism	GMROI	.244	.220
Machiavellianism	Sales per square foot	.265	.181

Note. The probabilities for the external control group are one-tailed; those for the internal control group are two-tailed.

selves as being subject to external control are more likely to be better managers than internally oriented individuals. One possible explanation for this finding is that our subjects were in a boundary-spanning position that involved daily telephone contact and written communications with their immediate supervisors but only minimal face-to-face interaction. Superiors visited stores on a limited basis, and there may have been a tendency for managers to perceive the telephone contact and written communications as being constraining and oppressive. Although the observations in the current research are of only one firm, these patterns of interaction tend to be true for managers and their superiors in most retail chain settings.

If there is a lack of physically close supervision, managers high in Machiavellian traits may perceive opportunities to "take things into their own hands." Such managers may take the initiative and develop ways of improving store performance. When managers can take these tactical initiatives (e.g.,

controlling personnel budgets, ordering new merchandise, changing store layouts), individuals high in Machiavellian traits can assert influence over an antagonistic work setting. These tactics bring about better performance and are not detrimental to the firm.

Another possible explanation is rooted in the notion that individuals perceive others as being similar to themselves. Thus, externally oriented individuals will perceive others as having a need to be controlled. Because of the lack of overt power, they will make use of Machiavellian techniques to achieve their goals. As with the prior explanation, better performance may result with no damaging effect on the organization.

Although the results of this study may interest academicians and practitioners, conclusions based on these findings must remain guarded. Data were secured from one firm at one point in time. The fact that the sample was drawn from one firm may have yielded a more homogeneous group, possibly masking differences. Additional research is needed with managers in other environmental settings (e.g., manufacturing and service firms and other types of retail organizations). Further, because of the large number of women currently employed in industry and the growing number being employed in managerial positions, future research should include female managers. Moreover, longitudinal studies are needed to explore the changes that take place in an individual's LOC and Machiavellian orientation over time.

Overall, this research contributes to a better understanding of LOC as a moderator in the Machiavellianism–job performance relationship. Other factors, however, cannot be eliminated as having an impact on performance. For example, competitive conditions are beyond the control of the manager and may inhibit high levels of performance. Future research can address the interactive effect of situational variables and how they can modify the LOC, Machiavellianism, and job performance relationship.

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Received February 8, 1994