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COMPONENTS OF MANAGERIAL BEHAVIOR THAT INFLUENCE RESPIRATORY THERAPISTS’ PERCEPTION OF THEIR SUPERVISION

H. Duane Akroyd²
Randal Robertson

Abstract: The impact of managerial behavior upon staff may have considerable implications for employees’ performance, satisfaction and patient care. The purpose of this study was to determine the leadership styles of a group of respiratory therapy managers, the effect of their behavior (task and consideration) upon employee satisfaction with supervision and to determine which styles were associated with lower (and higher) levels of staff satisfaction. The results indicated the predominant leadership styles were high task/high consideration and low task/low consideration. Both task and consideration behavior contributed significantly to staff therapists’ satisfaction with supervision, with consideration having the greatest effect upon satisfaction. The leadership style of low task/low consideration was associated with significantly

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Managers' leadership styles can have a significant impact upon subordinates' job satisfaction. Suresh, Salipante, Cummings, Notz, Begilow and Waters (1977) found that the management style or philosophy of supervisors influenced employees' job satisfaction. A recent study in respiratory care found that supervision significantly contributed to the overall job satisfaction of respiratory therapists working in adult general and critical care (Akroyd & Robertson, 1989). Bass (1981) in his comprehensive review of leadership research states that managerial behavior (leadership style) correlates with group productivity, goal attainment and follower performance.

Leadership style may be defined as the acts in which a manager engages in the course of directing and coordinating various components of work. This may involve structuring the work relations, praising or criticizing group members and showing consideration for their welfare and feelings (Fiedler, 1967).

Two predominant leadership behaviors, identified from past research are consideration and initiating structure (Hersey & Blanchard, 1982). Consideration behavior is indicative of friendship, mutual trust, respect and warmth. Task or initiating structure refers to behaviors that establish patterns of organization, channels of communication, methods of procedure and regulation. Past research regarding the relationship of leadership behavior and employee satisfaction and performance has been mixed (Bass, 1981). A few recent studies in respiratory care (Akroyd & Robertson, 1989; Mathews, Lira & Meis, 1984;
Rawlins, 1987) have dealt with job satisfaction, but there have been none that have examined the relationship between managers’ leadership behavior and staff satisfaction. Certainly factors that impact staff therapists’ job satisfaction have implications for managers, employees and ultimately, patient care.

The purpose of this study was to: (a) determine the leadership styles of respiratory therapy managers as perceived by staff therapists, (b) determine the effect of managers’ task and consideration behavior upon staff therapists’ satisfaction with supervision, and (c) determine leadership styles associated with higher levels of staff satisfaction.

Methodology

Population

The study population included registered respiratory therapists from the nine states listed in Table 1. Two hundred and five therapists were selected randomly by state from a numbered list supplied by the Management Services Division of the National Board for Respiratory Care (NBRC).

Instrumentation

In addition to demographic information, the questionnaire contained (a) the Job Descriptive Index (JDI) (Smith, Kendall, & Hulin, 1969), to measure therapists’ satisfaction with supervision and (b) Leader’s Behavior Descriptive Questionnaire (LBDQ) (Halpin & Wirier, 1957) to measure staff perception of their managers’ behavior.

There were five questions related to demographic information on the questionnaire. The first requested work status (full-time, part-time or not currently working). The second was gender and the third regarded employer type (hospital, outpatient clinic, home care agency or other).
Table 1

Population Size and Number of questionnaires Mailed and Returned, by State

<table>
<thead>
<tr>
<th>State</th>
<th>Population</th>
<th>Questionnaires</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mailed</td>
<td>Returned</td>
</tr>
<tr>
<td>Alabama</td>
<td>112</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Florida</td>
<td>689</td>
<td>69</td>
<td>39</td>
</tr>
<tr>
<td>Georgia</td>
<td>238</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>Kentucky</td>
<td>106</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Louisiana</td>
<td>205</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>North Carolina</td>
<td>180</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>South Carolina</td>
<td>115</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Tennessee</td>
<td>234</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Virginia</td>
<td>164</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>2043</td>
<td>205</td>
<td>125</td>
</tr>
</tbody>
</table>

The fourth question requested the number of years respondents had in their current positions. The last demographic question was the type of respiratory care practiced (adult critical care, perinatal/pediatric care, general respiratory care, diagnostic laboratory, manager/supervisor or other). The demographic questions were reviewed by registered respiratory therapists to provide content validity.

Job Descriptive Index. The JDI was developed at Cornell University to measure various facets of job satisfaction. For this study, only
the measure of satisfaction with supervision (13 items) was used which was the dependent variable. There was a group of adjectives, or descriptive phrases, regarding satisfaction with supervision that respondents wrote "Y" if the phrase described their manager, "N" if it did not or "?" if they were unsure. Each answer was assigned a numeric value that allowed it to be scored—Smith, Kendall and Hulin (1969) reported a Spearman-Brown coefficient of .80 and test-retest reliability coefficient between .70 and .80 for the JDI. Young (1982) found an average coefficient of internal consistency of .79.

Leadership Behavior Descriptive Questionnaire. The LBDQ developed by Halpin and Wirier (1957) addressed two factorially defined aspects of leader behavior: consideration and initiating structure (task). Bass (1981) reported high internal consistency for the LBDQ and reliabilities of .90 for consideration and .78 for task. The two subscales consist of 15 questions to measure each leadership dimension. Responses to questions were converted to a numeric score for each subscale. Task and consideration were the independent variables.

Data Collection

Questionnaires along with a cover letter explaining the nature of the study and a postage paid response envelope were mailed to each of the 205 subjects in the sample. Four return mailings, in two week intervals, were conducted for non-respondents over a two month period. The overall (n = 125 or 61%) and state-wide response rate can be found in Table 1.

Data Analysis

All statistics were performed using version 6.04 of PC-SAS (1987). The data set was created using the PC-SAS FSP function. Frequency
distributions and means were used to report demographic data and to classify the four leadership styles. Forced entry multiple regression determined the effect of leader behavior (task and consideration) upon therapists’ satisfaction with supervision. The PROC GLM procedure for unbalanced data from PC-SAS was used to determine if any significant differences existed with satisfaction by leadership style. Tukey's post hoc comparison identified leadership styles associated with significantly different satisfaction scores.

Results and Discussion

Demographic Data

Only respondents who worked full-time in hospitals and did not have significant managerial or supervisory responsibilities were utilized for analysis. The intent of this study was to focus on the environment and employees where the majority of respiratory care occurs. Of the 205 subjects, there were 125 respondents. Seventy of the 125 met the above criteria and that subsample was used for all analyses. The subsample consisted of 42 males (60%) and 28 females (40%). Table 2 contains the bed size of hospitals in the subsample. Seventy-nine percent of the subsample were employed in either adult critical care or general respiratory care (Table 3).

Reliability

The reliability of the satisfaction with supervision scale of the JDI, used with the present sample, was .74. The reliabilities for the LBDQ, used with the sample from this study, were .87 for task and .76 for consideration. The composite reliability for the LBDQ was .82. Reliabilities were the inter-item consistency type utilizing the repeated option of PROC GLM of SAS (1987).
Table 2

Bed Size of Respondent's Hospital

<table>
<thead>
<tr>
<th>Bed Size</th>
<th>n</th>
<th>%</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 100</td>
<td>6</td>
<td>8.6</td>
<td>8.6</td>
</tr>
<tr>
<td>101 - 300</td>
<td>22</td>
<td>31.4</td>
<td>40.0</td>
</tr>
<tr>
<td>301 - 500</td>
<td>20</td>
<td>28.6</td>
<td>68.6</td>
</tr>
<tr>
<td>501</td>
<td>22</td>
<td>31.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3

Type of Respiratory Care Performed

<table>
<thead>
<tr>
<th>Practice</th>
<th>n</th>
<th>%</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Critical Care</td>
<td>28</td>
<td>40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Pediatric Care</td>
<td>9</td>
<td>12.9</td>
<td>52.9</td>
</tr>
<tr>
<td>General Respiratory Care</td>
<td>27</td>
<td>38.6</td>
<td>91.4</td>
</tr>
<tr>
<td>Diagnostic Lab</td>
<td>6</td>
<td>8.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Statistical Findings

Table 4 contains the mean values for task, consideration and satisfaction with supervision. To determine the leadership style of managers, the scores for task and consideration behavior were split at the mean.
Table 4

Mean Scores for Task, Consideration and Satisfaction With Supervision

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>m</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>50.0</td>
<td>8.0</td>
<td>69</td>
</tr>
<tr>
<td>Consideration</td>
<td>50.3</td>
<td>10.2</td>
<td>71</td>
</tr>
<tr>
<td>Sat. w/Supervision</td>
<td>27.5</td>
<td>10.79</td>
<td>39</td>
</tr>
</tbody>
</table>

The Ohio State Leadership Studies, from which the LBDQ was derived, utilized a similar leadership grid to represent four leader behaviors or styles (Halpin & Wirier, 1957). Figure 1 depicts managers’ leadership styles as perceived by staff therapists. Also listed is mean satisfaction with supervision scores (X1 - X4) for each leadership style. The predominant leadership style was one of high task and high consideration behavior for managers although it was followed closely by low task and low consideration. The two styles accounted for 74% of the total.

To determine the effect of managers’ task and consideration behavior upon staff therapists’ satisfaction with supervision, a forced entry multiple regression model was used. Satisfaction with supervision (SUPER) was the criterion (dependent) variable and task and consideration were the predictor, or independent variables. The standardized (B) and unstandardized (b) regression coefficients for each predictor variable in the model are presented in Table 5.
High

| Low Task/ | High Task/ |
| High Consideration | High Consideration |
| (n = 12) | (n = 27) |
| X3 Super = 31.4 | X2 Super = 35.5 |

Low Consideration (mean = 50.3)

| Low Task/ | High Task/ |
| Low Consideration | Low Consideration |
| (n = 25) | (n = 6) |
| X4 Super = 17.0 | X1 Super = 26.7 |

Low------------------------Task------------------------High

Figure 1. Staff therapists' perception of managers' leadership style with associated satisfaction scores.

Table 5

Standardized (B) and Unstandardized (b) Regression Coefficients for Each Predictor in the Model

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Standardized Coefficient B</th>
<th>Unstandardized Coefficient b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consideration</td>
<td>.706* (p = .0001)</td>
<td>.750*</td>
</tr>
<tr>
<td>Task</td>
<td>.181* (p = .031)</td>
<td>.242*</td>
</tr>
</tbody>
</table>

R2 (for model) = .647
F (for model) = 64.14
P (for model) = .0001

* P < .05

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Together, the predictor variables accounted for a significantly large percentage (65%) of the variance in staff satisfaction with supervision. Both predictor variables were significant predictors of the dependent variable (p = .0001). The contribution of each predictor can be determined by the magnitude of its associated standardized (B) or scale free regression coefficient. Values close to 1.0 indicate a very large contribution, while those close to zero indicate little or no contribution (Pedhazur, 1982). Consideration behavior contributed more (B = .71) to staffs’ satisfaction than did task (B = .18), although both were significant predictors of satisfaction with supervision.

To determine if there were any significant differences in satisfaction by leadership style, an analysis of variance using a general linear model procedure for unbalanced data was used. The results (Table 6) indicated that there was a significant difference in the mean satisfaction scores by leadership style.

Tukey's post hoc comparison indicated that a leadership style of low task and low consideration was associated with significantly lower levels of satisfaction with supervision than any other style (F = 2.7, df = 66). There were no significant differences in satisfaction between the other three leadership styles (Figure 1 for satisfaction scores by leadership style).

**Discussion**

In regards to the leadership styles of respiratory therapy managers, Figure 1 indicates that staff therapists perceived there were two predominant styles; high task/high consideration (39%) and low task/low consideration (36%). These were opposites. Although there is no agreement on a best leadership style, behavioral research indicates that most people need reasonable levels of consideration behavior both
<table>
<thead>
<tr>
<th>Source</th>
<th>degrees of freedom</th>
<th>sum of squares</th>
<th>mean square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>3</td>
<td>4659</td>
<td>1553</td>
<td>30.4</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>66</td>
<td>3370</td>
<td>51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>8029</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

on and off the job. Maslow (1954) considered esteem or “strokes” to be a major component of self confidence.

Approximately 36% of the staff therapists in this sample perceived their managers utilizing a low task/low consideration style. This style has also been classified as laissez-faire behavior or the absence of leadership (Lewin, Lippett & White, 1960). It is a style that has characterized managers as developing few policies or procedures, leaving people alone and making few attempts to influence anyone in goal achievement. Blake and Mouton (1978), who developed the concept of the managerial grid, considered such a style as “impoverished management.” They characterized such managers as emotionally resigned and indifferent with motivation directed at doing only enough to keep the organization functional.

In certain circumstances it may be appropriate to utilize a low task/low consideration style. The large percentage of managers perceived practicing such a style is disturbing given the dynamics of a department of respiratory care.
The other predominant style was high task/high consideration (39%). Blake and Mouton (1978) likened this style of leadership to team management and considered it the most effective. They contended that it is characteristic of managers who have a desire to contribute to organizational success, coupled with a commitment to the people with whom they work. There is an emphasis on teamwork in the decision making process.

Likert (1967), in a study of more than 220,000 managers over a thirty year period, concluded that a high task/high consideration leadership style was most effective. Hersey and Blanchard (1982) considered this style as one of “selling” because the direction is provided by the leader. Through two-way communication and explanation, the manager attempts to get employees to “buy into” desired behaviors to achieve goals. While there is not agreement among theorists regarding one best style of leadership, it is reassuring to see that a large percentage of staff respiratory therapists perceive their managers utilizing a style that demonstrates concern for organizational goals and tasks, as well as the people need to achieve them.

Only a small percentage of therapists (9%) perceived their managers using a high task/low consideration style. Lawler and Hackman (1960) contend that continuous use of such a style may be effective on a short-term basis but eventually will be detrimental to employee satisfaction and organizational performance. Hersey and Blanchard (1982) characterized such a style as “telling” where managers define rules and tell employees what, how and where to do various tasks.

Seventeen percent of the sample perceived their managers utilizing a low task/high consideration style. Hersey and Blanchard (1982) call
such a style “participatory” where managers use supportive non-directive behaviors. In a department where employees are focusing on tasks to achieve goals and the operation is flowing well, a low task/high consideration style may be appropriate. It is important to remember that the most effective leadership style utilized may be dependent upon the person or group and the specifics of the situation (Hersey & Blanchard, 1982). The previous discussion focused on the pros and cons of utilizing various leadership styles.

The second purpose of this study was to assess the effect of task and consideration behavior of managers upon staff therapists’ satisfaction with supervision. In this sample, consideration ($B = .71$, $p = .001$) had a large effect upon the variance of staffs’ satisfaction with supervision. Previous studies have demonstrated that consideration is correlated with less burnout and stress and higher levels of job satisfaction (Akroyd & Long, 1990; Seltzer & Numerof, 1988; Sheridan & Vrendenburgh, 1979). Intuitively, the previous results seem logical. It is also interesting to note that managerial task behavior also correlates with satisfaction with supervision ($B = 18$, $p = .03$), although to a lesser degree than consideration.

That respiratory therapists see the need for a certain amount of task behavior by their managers is appropriate. It is not unusual for staff to expect a manager to exercise influences on matters related to clinical task performance and the work environment. While too much task behavior can increase the likelihood of grievances, absenteeism, turnover and burnout (Seltzer & Numerof, 1988; Sheridan & Vrendenburgh, 1979), a certain amount of pointing out the “path to successful effort” is characteristic of an effective supervisor. However, the key to
leadership style seems to be balancing out the proportion of task and consideration. Bass (1981) contends that the type of organization and the group involved are important factors that must be taken into account.

The third purpose of this study was to determine which leadership styles are associated with higher levels of satisfaction. The results of the analysis of variance indicated that staff satisfaction with supervision was significantly less when managers utilized a low task/low consideration style (Figure 1). The literature supports the contention that such a style may be detrimental for both employee and organization (Akroyd, 1988; Bass, 1981; Blake & Mouton, 1978; Likert, 1967). With Little direction or supportive behavior, staff's perception of supervision was typically low. There was no significant difference in satisfaction by the other three leadership styles. It is interesting to note that the highest score for satisfaction (see Figure 1) was associated with managers perceived as using a high task/high consideration style. This seems to support Blake and Mouton's (1978) and Likert's (1967) theory that a high task/high consideration style is most effective, at least in terms of employee satisfaction.

Conclusions, Implications and Recommendations

Conclusions

The following conclusions have been drawn based on the data analysis:

1. The most predominant leadership style of respiratory therapy managers as perceived by staff was high task/high consideration (39%), followed closely by a style of low task/low consideration (36%). The style represented by the fewest managers was high task/low consideration
A low task/high consideration style was representative of 17% of the managers.

2. Both task and consideration behavior of managers had a significant effect upon the variance of staff respiratory therapists perception of their satisfaction with supervision. The contribution of consideration behavior to staff satisfaction was significantly greater ($B = .71$) than task ($B = .18$).

3. The leadership styles associated with significantly higher levels of staff satisfaction with supervision were high task/low consideration, high task/high consideration and low task/high consideration.

**Implications**

The use of a leadership style associated with decreased levels of satisfaction may have implications for employee morale, patient care and productivity. Taunton, Krampitz and Woods (1989), investigating managers' impact upon retention of hospital staff, found that employee perception of managers' leadership style was correlated with their job satisfaction, intent to stay and retention. Kaluzny (1989), discussing the role and function of middle managers in health care organization, suggests a refinement of their behavioral skills to become more effective in developing consensual decision making and mutual influence. The leadership behavior of managers has implications for organizational effectiveness, employee satisfaction and ultimately patient care.

**Recommendations**

Based upon the findings, it would seem appropriate for hospitals to offer a variety of educational and training opportunities related to leadership development for their middle managers. It is not unusual for
managers in health care to be promoted based on technical expertise while lacking preparation for their new responsibilities.

It is also important for hospital administration to periodically assess department managers’ effectiveness. One aspect of this may involve input from the departmental staff. At Baptist Medical Centers in Birmingham, Alabama, an annual employee survey is conducted regarding a variety of aspects that may impact job satisfaction (T. Long, personal communication, October 10, 1990). One part of the survey contains items that are related to the department heads’ fairness as well as technical and administrative ability to manage the department. Such input can be important in identifying any problems and developing strategies to deal with them.

Health occupations student in high school may eventually practice in a hospital setting and possibly move into supervisory or management positions with appropriate experience and credentials. Thus, it would be logical to offer some leadership training for these students while in high school. Many postsecondary health programs concentrate only on discipline courses, clinical education and a small number of general education courses. Leadership training for health occupations students in high school could be very useful and applicable in a variety of work settings.

References


