Impact of Transformational Leadership on Vocational Rehabilitation Industry

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ABSTRACT - The United States vocational rehabilitation industry retrained injured workers by sending them back to trade schools or vocational colleges to acquire another skill that is usually less physically strenuous. In order to retrain injured workers this vocational rehabilitation industry small business owners must hire their own staff to prepare and manage the injured worker case load. The concern encompasses the work behaviors of the small business owners and the employees in this vocational rehabilitation industry, and the type of leadership that may be used to influence their behaviors. TL represents a motivational management paradigm. It encompasses a method of controlling the vocational rehabilitation industry small business owner’s and the employee’s work behaviors by using corrective transactions. This research deals with the influence of transformational leadership on behaviors of owners and employees of small businesses within the vocational rehabilitation industry. Specifically, this research examined the influence of transformational leadership on the work behaviors of the owners as well as that of the employees in this segment of industry. The quantitative study sent 2,000 Multifactor Leadership Questionnaire surveys by internet to a sample of United States vocational rehabilitation industry small business owners and employees to examine the influence of transformational leadership methods. National lists of United States vocational rehabilitation industry small business owners and employees composed the sample. Seventy-two respondents answered the survey. Small business owners comprised forty-nine respondents. Small business employees comprised twenty-three respondents. Statistical analysis confirmed that transformational leadership positively influenced the work behaviors of United States vocational rehabilitation industry small business owners as well as the small business employees. The analysis further shows that the influence on the owners and the employees were similar.

Keywords - Corrective transactions, transactional leadership, transformational leadership, vocational rehabilitation industry, work behavior.

1. INTRODUCTION

Transactional leadership uses reward and punishment to motivate employees because transactional leadership involves the exchange of rewards for employees’ efforts [1, 2, 3]. Transactional leadership gains employees’ attention by clarifying expectations followed by offering reward or punishment according to the employees’ performance [4, 5]. Transactional leadership promotes stability. One the other hand, transformational leadership (TL) promotes idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The concept of TL describes how business owners persuade their employees to set aside their selfish pursuits and work toward a collective purpose in the vocational rehabilitation industry [1, 3, 6]. Research indicates TL succeeds by influencing vocational rehabilitation industry employees to identify with vocational rehabilitation industry small businesses [3, 7, 8, 9]. TL changes the way vocational rehabilitation industry employees see themselves from isolated individuals to members of vocational rehabilitation industry small businesses. Vocational rehabilitation industry small business owners (SBOs) do this by gaining the commitment of the
employees through self-sacrifice, the use of the word “we” instead of “I”, highlighting the similarity of vocational rehabilitation industry employees, and reinforcing collective goals, shared values, and common interests in the vocational rehabilitation industry [3,8,9]. The employees endorse group values and goals when the employees see themselves as members of vocational rehabilitation industry small businesses. This increases the employees’ motivation to contribute to the greater good of the business[3,7]. TL represents a method of controlling the employees’ behaviors, and eliminates their problems by using corrective transactions between SBOs and their employees [3,6,11,12].

The US vocational rehabilitation industry refrains injured workers by sending the worker back to trade school or vocational college to acquire another skill that is usually less physically strenuous. In order to retrain injured workers, these vocational rehabilitation industry SBOs, consisting of law firms or private businesses, must hire their own staff to prepare and manage the injured worker case load. The concern for the SBOs is the employees’ productivity. Many US vocational rehabilitation industry SBOs run their small businesses using termination-at-will employment contracts with employee rewards, such as perks, year-end bonuses, spending accounts, or commission to increase employees’ productivity. However, using monetary reward does not represent the only way to influence employees’ productivity. TL represents an alternative way to motivate employees to improve productivity in these industries.

TL encompasses US vocational rehabilitation industry SBOs assessing employees’ motivation, desires, and needs and acting upon them [13,14]. TL exemplifies the process where US vocational rehabilitation industry SBOs create a connection, which elevates the level of motivation and ethics in both US vocational rehabilitation industry SBOs and employees. These SBOs remain aware of the needs and desires of employees and support them to attain their fullest potential [14,15]. SBO employees under TL sense trust, admiration, loyalty and respect toward the SBO and become motivated to perform additional work tasks [1,14,16]. These SBOs using TL go beyond personal interests and contemplate the moral and ethical cost of their actions [17,18]. Trustworthiness and integrity encompass the essential aspects of effective TL [18,19]. This leadership style inspires employees with challenge and persuasion, and provides both meaning and understanding to employees while expanding employees’ use of their abilities. TL also provides employees with support, mentoring, and coaching [20] while motivating employees to exceed expected performance, which leads to high levels of employees’ satisfaction, and commitment to groups, and small businesses [1,11,20]. Several mediators affect the relationship between TL and exceptional performance as well. First, US vocational rehabilitation industry SBOs enhance the self-concept and sense of self-efficacy of employees. Second, identification with US vocational rehabilitation industry SBOs and groups become important. Third, keys to motivating follower performance consist of shared goals and values. Fourth, US vocational rehabilitation industry SBOs empower their employees to perform beyond expectations [8,20].

TL inspires employees to commit to shared visions and goals for businesses, challenges employees to become innovative problem solvers, and develops employees’ leadership capacity via coaching, mentoring, challenging, and supporting employees. US vocational rehabilitation industry SBOs reinforce employees’ self-esteem through expressions of confidence in employees, and setting high expectations, which engage greater commitment to small businesses’ efforts by employees. Participation by employees in small businesses’ efforts becomes an expression of membership and identity with the social collective under TL [20]. US vocational rehabilitation industry SBOs respond to individual employee needs with employee empowerment, and coordination of the employee’s objectives and goals with the leader, the group, and business. These responses help employees to grow and develop into leaders [1,11,20]. US vocational rehabilitation industry SBOs empower employees, and pay attention to employees’ individual needs and personal development to help employees develop their own leadership potential [20].

Small business failures may occur when rigid organizational structures of rules, regulations, job specifications, and passive management-by-excitation exist. Small businesses failure also occur when the life span of small businesses’ products and services last only a few years, the risk of obsolete technology increases, or small businesses operate in a turbulent environment. These situations call for small business owners with vision, confidence, and determination. US vocational rehabilitation industry SBOs motivate their employees to assert themselves, and to join enthusiastically in small businesses efforts and shared responsibilities to achieve small businesses goals in these situations. US vocational rehabilitation industry SBOs also use charismatic-inspirational qualities, attention to individualized consideration, and intellectual stimulation for small businesses to operate under these circumstances [20].

TL encompasses a method of controlling US vocational rehabilitation industry SBOs’ and employees’ work behaviors by using corrective transactions between SBOs and their employees. This research provides a quantitative analysis of the effect of TL on US vocational rehabilitation industry SBOs and their employees by analyzing the following three areas:

1. Does TL influence United States vocational rehabilitation industry SBOs’ work behaviors?
2. Does TL influence United States vocational rehabilitation industry small business employees’ work behaviors?
3. Does transformational leadership influence United States vocational rehabilitation industry SBOs’ and employees’ work behaviors differently?

2. RESEARCH DESIGN AND METHODOLOGY

This statistical study determines the influence of TL on US vocational rehabilitation industry SBOs’ and employees’ work behaviors. The one independent variable is the use of the ‘TL management paradigm. The statistical study used an ex-post facto design, which did not control or manipulate the independent variable. The dependent variables represented US vocational rehabilitation industry SBOs’ and employees’ work behaviors. This included employees’ observable activities consisting of problem solving, expressing viewpoints, and treatment of other SBOs or employees. The statistical study’s research design used a formal research method to determine the causation between transformational leadership and US vocational rehabilitation industry SBOs’ and employees’ work behaviors. The quantitative design obtained statistical data by administering Likert scaled closed-ended question surveys to a sample of vocational rehabilitation industry SBOs and employees. Surveys allowed identification of the influence of TL on US vocational rehabilitation industry SBOs’ and employees’ work behaviors. The surveys evaluated the range of responses on an interval scale from 1–5 to measure TL as quantified in SBOs’ and employees’ work behaviors consisting of problem solving, expressing viewpoints, and treatment of other SBOs or employees. Statistical analysis of the surveys determined the results.

The study sent out 2,000 surveys by internet to the target audience of US vocational rehabilitation industry SBOs and employees for the field portion of the research. National lists of US vocational rehabilitation industry SBOs and employees composed the sample. The surveys’ format included self-administered questionnaires with instructions to the respondents on how to answer closed ended questions using a Likert scale of 1 to 5: 5 being frequently if not always, and 0 being not at all. The respondents answered the questions by circling a number from 1–5. These surveys allowed identification of the influence of TL on US vocational rehabilitation industry SBOs’ and employees’ work behaviors in a population of US vocational rehabilitation industry small businesses. The study’s cross-sectional surveys collected data at one point in time, and format contained self-administered questionnaires that were given over the internet for research convenience.

Quantitative validity, reliability, and the level of significance were measured and analyzed. The quantitative validity included content validity, predictive or concurrent validity, and construct validity[21]. The construct validity also included analyzing whether the scores serve a useful purpose, and have positive consequences when used in practice [21,22]. The scores predicted survey criteria correctly and correlated with other results. The items also measured the hypothetical concepts of the study’s research questions and hypotheses shown in the introduction to this research paper. Reliability consists of item responses that remain consistent across constructs, stable scores during a second administration of the instrument, test administration in general, and scoring [21,23]. Quantitative instrument reliability consisted of verifying the internal consistency of responses across dependent and independent variables by comparing the surveys’ responses from different subjects, and checking scores remain stable during the administration of the surveys to the respondents. Additionally, the study checked for administration errors and scoring errors during the administration of the surveys to the respondents. The level of significance represents the probability of Type 1 error. Type 1 error occurs when the researcher incorrectly rejects a true null hypothesis [24]. The study conducted research at the 0.05 level of significance. The 0.05 level of significance means the researcher incorrectly rejected the null hypothesis with probability of 0.05.

The statistical study presented the data collected from the surveys factually, and free from any biases. The study presented the quantitative data collected from the surveys using Chi Square goodness of fit tests and Chi Square tests of independence. The research anticipated that the findings will support the theory that TL influences US vocational rehabilitation industry SBOs’ and employees’ work behaviors.

3. RESEARCH RESULTS

The research analysis provided significant insight into the influence of TL on United States vocational rehabilitation industry SBOs’ and employees’ work behaviors. Results and conclusions are for the following two research areas:

4. Does TL influence United States vocational rehabilitation industry SBOs’ work behaviors?
5. Does TL influence United States vocational rehabilitation industry small business employees’ work behaviors?
6. Does transformational leadership influence United States vocational rehabilitation industry SBOs’ and employees’ work behaviors differently?
Descriptive statistics measure the number of respondents, mean, standard deviation, skew, and kurtosis. The mean represents the average score. The average comprises the total score divided by the number of responses. The standard deviation represents the average linear distance from the mean. The standard deviation becomes the empirical curve’s measurement benchmark. Negatively skewed scores contain more scores to the right of the middle score. Positively skewed scores contain more scores to the left of the middle score. Negative kurtosis represents fewer middle scores than a symmetrical distribution. Positive kurtosis represents more middle scores than a symmetrical distribution [24]. 72 respondents answered the Multifactor Leadership Questionnaire (MLQ). Table 1 presents the SBOs’ descriptive statistics. Table 2 presents the employees’ descriptive statistics.

**Table 1: SBO Descriptive Statistics Table**

<table>
<thead>
<tr>
<th>Question Number</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Skew</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>49</td>
<td>4.06</td>
<td>1.049</td>
<td>-1.255</td>
<td>1.408</td>
</tr>
<tr>
<td>2</td>
<td>49</td>
<td>3.88</td>
<td>1.111</td>
<td>-0.889</td>
<td>0.197</td>
</tr>
<tr>
<td>3</td>
<td>49</td>
<td>4.06</td>
<td>1.088</td>
<td>-1.138</td>
<td>0.851</td>
</tr>
<tr>
<td>4</td>
<td>49</td>
<td>3.98</td>
<td>1.216</td>
<td>-0.974</td>
<td>-0.171</td>
</tr>
<tr>
<td>5</td>
<td>49</td>
<td>4.18</td>
<td>1.112</td>
<td>-1.422</td>
<td>1.360</td>
</tr>
</tbody>
</table>


**Table 2 - Employee Descriptive Statistics Table**

<table>
<thead>
<tr>
<th>Question Number</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Skew</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>3.78</td>
<td>1.085</td>
<td>-0.929</td>
<td>0.627</td>
</tr>
<tr>
<td>2</td>
<td>23</td>
<td>3.74</td>
<td>1.176</td>
<td>-0.727</td>
<td>-0.253</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>4.09</td>
<td>1.345</td>
<td>-1.398</td>
<td>0.735</td>
</tr>
<tr>
<td>4</td>
<td>23</td>
<td>3.87</td>
<td>0.968</td>
<td>-1.366</td>
<td>2.664</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
<td>4.00</td>
<td>1.168</td>
<td>-1.313</td>
<td>0.976</td>
</tr>
</tbody>
</table>


Frequency distributions show the total number of responses for each of the Likert scale categories 1–5 pertaining to the five MLQ survey questions. Table 3 presents the SBOs’ frequency distributions. Table 4 presents the employees’ frequency distributions.

**Table 3 - SBO Frequency Distribution Table**

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Not at All 1</th>
<th>Once in a While 2</th>
<th>Sometimes 3</th>
<th>Fairly Often 4</th>
<th>Frequently If Not Always 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>9</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>13</td>
<td>26</td>
</tr>
</tbody>
</table>

### Table 4 - Employee Frequency Distribution Table

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Not at All</th>
<th>Once in a While</th>
<th>Sometimes</th>
<th>Fairly Often</th>
<th>Frequently If Not Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>2.</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>3.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>4.</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>10</td>
<td>9</td>
</tr>
</tbody>
</table>


The study conducted a Chi Square goodness of fit test for research area 1 using the five MLQ questions. The results appear in Table 5.

### Table 5 - Chi Square Goodness of Fit Test for SBOs

<table>
<thead>
<tr>
<th>Question Number</th>
<th>N</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>49</td>
<td>30.69</td>
<td>4</td>
<td>.000*</td>
</tr>
<tr>
<td>2.</td>
<td>49</td>
<td>20.29</td>
<td>4</td>
<td>.000*</td>
</tr>
<tr>
<td>3.</td>
<td>49</td>
<td>29.50</td>
<td>4</td>
<td>.000*</td>
</tr>
<tr>
<td>4.</td>
<td>49</td>
<td>27.43</td>
<td>4</td>
<td>.000*</td>
</tr>
<tr>
<td>5.</td>
<td>49</td>
<td>41.10</td>
<td>4</td>
<td>.000*</td>
</tr>
</tbody>
</table>

Note. N = number of observations; $\chi^2$ = Chi Square value; df = degree of freedom; p = confidence level for a two tailed test; *p < .05. A significant Chi Square result exists when $p < .05$. A significant Chi Square result represents significant deviation from the hypothesized value. An insignificant Chi Square result exists when $p \geq .05$. An insignificant Chi Square result represents no significant deviation from the hypothesized value (Cronk, 2008). Multifactor Leadership Questionnaire questions adapted from B. J. Avolio, and B. M. Bass, 2004, *Multifactor Leadership Questionnaire, Third Edition*, p. 111. Copyright 2004 by Bernard Bass and Bruce Avolio [25].

The SBOs’ observed answer frequency varied significantly from the hypothesized answer frequency. The study concluded that there is a significant difference in the way SBOs talk enthusiastically about that needs to be accomplished.

Research area 2 data analysis included the Chi Square goodness of fit test and post hoc analysis to test for frequency uniformity.

### Table 6 - Chi Square Goodness of Fit Test for Employees

<table>
<thead>
<tr>
<th>Question Number</th>
<th>N</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>23</td>
<td>11.13</td>
<td>4</td>
<td>.025*</td>
</tr>
<tr>
<td>2.</td>
<td>23</td>
<td>7.22</td>
<td>4</td>
<td>.125</td>
</tr>
<tr>
<td>3.</td>
<td>23</td>
<td>21.13</td>
<td>4</td>
<td>.000*</td>
</tr>
<tr>
<td>4.</td>
<td>23</td>
<td>21.57</td>
<td>4</td>
<td>.000*</td>
</tr>
<tr>
<td>5.</td>
<td>23</td>
<td>10.22</td>
<td>3</td>
<td>.017*</td>
</tr>
</tbody>
</table>
t represents significant
al performance reviews and promotion reviews to
selves. Full
han average scores of expressing satisfaction when
“A
The
Does
Does
st of independence to measure if independence or interaction existed for US vocational
“Results of this study
manuals can accompany the DVD presentations or internet downloads for SBOs who desire more in
downloads from motivational publishers can offer the SBO or manager the ability to train them
The vocational rehabilitation industry SBOs can also provide motivational seminar
implement
and employees. The industry SBOs can couple
employees’ work behaviors. Work behaviors consist of problem solving, expressing viewpoints, and treatment of other SBOs
training as part of the vocational rehabilitation industry small businesses’ business plan.
Recommendations for implement
changes in technology, by helping small businesses become more flexible and adaptable to these unexpected situations.
small business last only a few years, or the risk of obsolete technology increases
TL’s influence in the United States vocational reh
The research concludes the fraction of employees who have higher than average scores of expressing satisfaction when others meet expectations remains more than the fraction of employees who have less than average scores of expressing satisfaction when others meet expectations.
Research area 3 data analysis included the Chi Square test of independence to test for variable independence or variable interaction. The Chi Square test of independence measures if two variables remain independent of each other. A significant Chi Square result exists when \( p < .05 \). A significant Chi Square result represents variable interaction. Variable interaction means the first variable does not remain related to the second variable. An insignificant Chi Square result exists when \( p \geq .05 \). An insignificant Chi Square result represents variable independence. Variable independence means the first variable remains related to the second variable [26]. The two variables represented US vocational rehabilitation industry SBOs and employees. The study used the Chi Square test of independence to measure if independence or interaction existed for US vocational rehabilitation industry SBOs’ and employees’ work behaviors. The study conducted a Chi Square test of independence using the five MLQ questions shown in Table 1. Results confirmed that the TL influences United States vocational rehabilitation industry SBOs’ and employees’ in a similar form.

4. CONCLUSIONS

In this research TL represented the independent variable which, influenced the dependent variables. The two dependent variables represented the vocational rehabilitation industry SBOs’ and employees’ work behaviors. The dependent variables included the observable activities of the employees, consisting of problem solving, expressing viewpoints, and treatment of other SBOs or employees. Statistical analysis of the independent variable answered the study’s research questions concerning TL’s influence in the United States vocational rehabilitation industry. The first question asked: “Does TL influence United States vocational rehabilitation industry SBOs’ work behaviors?” Results confirmed the answer yes, TL influences SBO work behaviors. The second question was: “Does TL influence United States vocational rehabilitation industry small business employees’ work behaviors?” Analysis and the results confirmed the answer yes, TL influences small business employees’ work behaviors. The only exception was that there was no significant difference in the way employees spend time teaching and coaching. The insignificant deviation shows marginal effectiveness concerning employees teaching and coaching. This is probably due to the accepted business custom where employees do not teach and coach as part of their job description. The third question was: “Does TL influence United States vocational rehabilitation industry SBOs’ and employees’ work behaviors differently?” Results of this study confirmed the answer no, TL does not influence SBOs and employees work behaviors differently. As expected, the exception was that there was significant difference in the way employees spend time teaching and coaching. This again is due to the fundamental accepted business custom where employees do not teach and coach as part of their job description.

5. RECOMMENDATIONS FOR IMPLEMENTING RESEARCH RESULTS

Small businesses fail when small businesses operate in a turbulent environment. The life-span of products and services in small business last only a few years, or the risk of obsolete technology increases [20]. The motivational management principles of TL respond to the urgency created by turbulent operating environments, short product or service life-spans, and changes in technology, by helping small businesses become more flexible and adaptable to these unexpected situations. Recommendations for implementation of this research include vocational rehabilitation industry SBOs incorporating TL training as part of the vocational rehabilitation industry small businesses’ business plan. TL training for vocational rehabilitation industry small business managers and owners will influence vocational rehabilitation industry SBOs’ and employees’ work behaviors. Work behaviors consist of problem solving, expressing viewpoints, and treatment of other SBOs and employees. The industry SBOs can couple TL training with annual performance reviews and promotion reviews to implement TL as part of vocational rehabilitation industry small business organizational structure and organizational culture. The vocational rehabilitation industry SBOs can also provide motivational seminars as part of quarterly meetings to reinforce the influence and charisma of TL concepts throughout the fiscal year. Self-administered short minute DVDs or internet downloads from motivational publishers can offer the SBO or manager the ability to train themselves. Full-length training manuals can accompany the DVD presentations or internet downloads for SBOs who desire more in-depth analysis of TL.
Motivational publishers can distribute licensed training kits containing the copyrighted TL training material to supply the broad vocational rehabilitation industry SBO market with annual review seminar and quarterly meeting presentation material.

6. RECOMMENDATIONS FOR FUTURE RESEARCH

This paper establishes a framework for future research for the comparison of TL against transactional leadership in the vocational rehabilitation industry by offering a venue of continued research and literature under the topic of TL. Recommendations include continued work directed toward large companies that may benefit from transformational management practices and procedures. Future research regarding TL may also include using TL in conjunction with transactional leadership for companies and departments. Large departments use supervisors whose function includes directly watching the employee, and department managers whose function involves managing the overall performance of the department. This type of department manager has no day today contact with employee. This leads to the possibility that the department manager can act in a transactional mode while the department supervisor can act in a transformational mode. Further analysis is required to determine if there an improvement in employee productivity in a department supervised by supervisors using TL and the department manager using transactional leadership. This may also include further work to determine if there an improvement in employee work behaviors under similar leaderships styles.

7. ACKNOWLEDGEMENTS

The authors thank and gratefully acknowledge the help and support received from the administration and staff at Argosy University, School of Business, and at National University, School of Engineering and Computing, during the continuing research on this subject and the preparation of this paper.

8. BIBLIOGRAPHY


