Leadership and Creativity: The Impact of Transformational Leadership on Individual Creativity

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Abstract

The purpose of this study is to analyze the relationship between transformational leadership and individual creativity by focusing on four dimensions of transformational leadership in a sample of 275 respondents. Understanding the relationship between transformational leadership and creativity helps leaders to develop and cultivate employees’ capacity for creativity. Results indicated a direct and positive link between intellectual stimulation and individual creativity. The results also indicate a positive link among inspirational motivation, idealized influence and individual creativity. However this positive relationship was significantly reduced when intellectual stimulation is included to the model.

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Keywords: Idealized influence, Inspirational motivation, Intellectual stimulation, Individualized consideration

1. Introduction

Importantly, since innovation at the organizational level is the result of creative efforts and achievements in manufacturing and commercial organizations, gaining an understanding of the effect of this form of leadership on organizational innovation is as important as understanding its effect on employees’ creativity (Gümüşlüoğlu, İlsev, 2009,462). Therefore, this study intends to research the effects of transformational leadership on creativity at the individual level. In accordance with previous studies, in this study we expect to find significant relationships among four dimensions of transformational leadership and individual creativity. First, we present the relevant literature leading to our specific research hypotheses. This is followed by discussions of the method and results of our study. We

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conclude the article with the the implications of the study with regard to existing literature and suggestions for future research.

2. Literature Review And Hypotheses

2.1. Transformational Leadership and Individual Creativity

Many studies have suggested that transformational leaders have better relationships with their followers and play a key role in creation of a supportive climate that promote employee creativity (Cummings & Oldham, 1997; Scott & Bruce, 1994; Tierney et al., 1999). Aspects such as task meaning and challenge, freedom and autonomy, team cooperation and friendliness, leadership support and organizational encouragement have been brought forward as important features to perceive the organizational climate as being supportive of creativity (Abbey & Dickson, 1983; Scott & Bruce, 1994; Amabile et al. 1996; Anderson & West, 1998; Woodman, Sawyer, & Griffin, 1993; Shalley, 1995; Cummings & Oldham, 1997). Furthermore, Oldham and Cummings (1996) found that high job complexity, supportive supervision, informational feedback, freedom and low oversight control facilitate creative and innovative behaviour of the employees (Oldham and Cummings, 1996).

According to Dunegan et al. (1992) divisional affiliation, work group interactions, and the quality of exchange between leader and subordinate significantly predict the perceptions of employees of climate factors believed to encourage creative activities in the firm (Mohammad; Rickards, 1996; 110). Scott and Bruce (1994) have also suggested that innovative behavior is related to supervisor-subordinate relationship. Some others have noted that trust and openness, challenge and involvement, debate, risk-taking, and and a tolerance for diversity among organizational members (Tidd and Bessant; 2009; Siegel and Kaemmerer, 1978; Kanter, 1983) are critical for support creativity. These aforementioned factors have been identified in the creativity researches as instrumental to enhance individual creativity and correspond to the behaviours of transformational leaders essentially. New learning opportunities are created along with a supportive climate in which change, divergent thinking and professional growth is emphasized. Relatedly, Siegel and Kaemmerer (1978) suggested that leaders who support for their members in functioning independently in the pursuit of new ideas facilitate their followers’ effort to be innovative and creative. Following the reasoning described above one can conclude that leaders have great power and influence on employee creativity by providing support for creativity. Accordingly, the leadership literature indicates that transformational leaders have even more significant role of creating and shaping circumstances that facilitate individual creativity. In other words, the four dimensions of TL including idealized influence (or charisma), inspirational motivation, intellectual stimulation, and individualized consideration promotes individual creativity by creating a supportive organizational climate.

First of all, leaders expected to have transformational effects by intellectually stimulating their followers (Avolio et al., 1999; Bass et al., 2003). When transformational leaders intellectually stimulate, they promote their followers’ effort to be creative by questioning assumptions, reframing problems, and approaching old situations in new ways (Bass & Riggio 2006: 7). They enhance generative thinking by encouraging followers to think “out of the box” and to apply exploratory thinking processes (Sosik, Kahai & Avolio, 1998: 112). New ideas and creative solutions to problems come from followers who challenge their own traditions, beliefs (Jung, Chow, Wu, 2003: 529) and express themselves openly without fear of negative interpersonal consequences (Kahn, 1990). Accordingly, it is hypothesized;

HI: Transformational leadership’s intellectual stimulation will be positively associated with individual creativity.

Secondly TL is also expected to be positively linked with creativity because of idealized influence. Idealized influence (or charisma) influence followers to perform beyond expectations (Bass, 1985, p. 32), make extra effort to accomplish tasks even when conditions are difficult and generate creative solutions for work related problems (Qu et al., 2015: 288). Followers admire, respect and trust leaders demonstrating idealized influence and view them as extraordinary and exceptional (Kark, Shamir, & Chen, 2003; Yukl, 1998). By appreciating and integrating different needs and viewpoints of group members and also by communicating confidence in their followers’ ability to meet
higher performance expectations TL may be conducive to individual creativity process. Accordingly, it is hypothesized;

**H2**: Transformational leadership’s idealized influence will be positively associated with individual creativity.

The third dimension individualized consideration focuses on how leaders pay attention to each individual’s need for achievement and growth by acting as a coach or mentor. Such leaders, who have a high awareness of each follower's uniqueness open up communication channels to facilitate new learning opportunities and likely to prompt the individual to go beyond traditional acting and to try out new ideas that might flow from their divergent thinking. Since they show tolerance, empathy and support (Shin & Zhou, 2003) somewhat risky and exploratory task activities incurred in creative behavior are likely to be viewed as opportunities beneficial to subordinates improvement and learning (To, Ashkanasy, Fisher, & Rowe, 2010; To et al., 2012). Accordingly, it is hypothesized;

**H3**: Transformational leadership’s individualized consideration will be positively associated with individual creativity.

Finally, inspirational motivation refers to the extent to which leaders are able to motivate their followers by articulating an inspirational and ambitious vision, cultivating a climate of psychological safety where followers are encouraged to take interpersonal risks and energizing followers to perform beyond expectations. In addition by communicating confidence in their followers’ ability they help employees to reframe challenges, see them as opportunities and try new approaches which can lead creative solutions for problems emerging in their tasks (Shamir, House, & Arthur, 1993). Accordingly, it is hypothesized;

**H4**: Transformational leadership's inspirational motivation will be positively associated with individual creativity.

3. Methodology

3.1. Selection of Sample and Respondents Demographics

In order to empirically investigate the hypotheses, tools such as e-mail, letter and face to face interviews are used for gathering data from the managers-top, middle or first line. Using the documents of Kocaeli Chamber of Commerce, 45 firms among 650 are identified as the target group of the research because of their availability. Of the 275 respondents 141 (51%) were men, and 134 (49%) were women. The majority of the participants 187 (68%) are married and ranged in age from 31 to 40 years 154 (56%). Of the participants, %53 had university educations and %26 had master education, %45 were first line managers, %44 were middle managers and %11 were top managers. Data from 275 employees have been evaluated by using of the SPSS 13.0 program

3.2. Measures

To test the above hypotheses, multi-item scales adopted from prior studies for the measurement of constructs were used. Individual creativity was measured by 13 items adopted from the creativity measure of Tierney et al. (1999). To measure transformational leadership the Multifactor Leadership Questionnaire Form 5X was used (Bass & Avolio, 1995). All items were measured on a five point Likert-type scale where (1) strongly disagree to (5) strongly agree.

3.3. Data Analysis And Results

To test the reliability of the scales used in the study, Cronbach Alpha scores were calculated for each scale. The Cronbach Alpha scores for each scale were good with overall Alpha reported of 0.70-0.87. Furthermore, in order to identify the underlying structure of various measures exploratory factor analysis using principle components of factor extraction and varimax rotation techniques was performed. It is found that one item in idealized effect dimensions of transformational leadership constitutes a different factor alone and also have a low correlation with all items. After throwing out this item factor analysis is employed again (Hatcher, 1994). As a cut-off loading was used 0.40. Most factor loadings were above 0.50 which can be assumed a high level of significance. The results from our factor analysis of the measurement items for each of the subscales (Table 1) imply that measures used in this study have
construct validity (Nunnally, 1978). The Alpha reliabilities of the factor were 0.84 (intellectual stimulation), 0.87 (idealized influence), 0.70 (inspirational motivation), 0.75 (individualized consideration), 0.80 (individual creativity) respectively (Table 2). The factor loading are seen Table 1.

Table 1. Factor Loading of Scale Items

<table>
<thead>
<tr>
<th>Intellectual stimulation</th>
<th>Idealized influence</th>
<th>Individualized consideration</th>
<th>Inspirational motivation</th>
<th>Individual Creativity</th>
</tr>
</thead>
<tbody>
<tr>
<td>.886</td>
<td>.818</td>
<td>.642</td>
<td>.745</td>
<td>.778</td>
</tr>
<tr>
<td>.880</td>
<td>.773</td>
<td>.635</td>
<td>.743</td>
<td>.743</td>
</tr>
<tr>
<td>.823</td>
<td>.756</td>
<td>.569</td>
<td>.714</td>
<td>.562</td>
</tr>
<tr>
<td>.688</td>
<td>.727</td>
<td>.435</td>
<td>.693</td>
<td></td>
</tr>
</tbody>
</table>

3.5. Correlation Analysis

We calculated means and standart deviations for each variable and correlation matrix of all variables. Means, standard deviations, reliabilities and correlations among all scales used in the analyses are shown in Table 2.

A correlation analysis was performed to examine interaction relationships among the variables. The results of correlation analysis shows us that there is two level relationships among variables with a significance level of p <0.01. The dimensions of transformational leadership such as intellectual stimulation, idealized influence, individualized consideration and inspirational motivation have significant positive correlations with individual creativity (p <0.01, Table 4).

Table 2. Descriptive Statistic, correlations and alpha reliabilities of the measures

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual stimulation</td>
<td>1.74</td>
<td>0.79</td>
<td>a. (0.84)</td>
<td>.776**</td>
<td>.793**</td>
<td>.814**</td>
<td>.233**</td>
</tr>
<tr>
<td>Idealized influence</td>
<td>2.73</td>
<td>0.78</td>
<td>a (0.87)</td>
<td>.731**</td>
<td>.762**</td>
<td>.306**</td>
<td></td>
</tr>
<tr>
<td>Individualized consideration</td>
<td>3.49</td>
<td>0.80</td>
<td>a (.70)</td>
<td>.772**</td>
<td>.246**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td>4.16</td>
<td>0.60</td>
<td>a (.75)</td>
<td>.213**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Creativity</td>
<td>5.99</td>
<td>0.55</td>
<td>a(.80)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
3.6. Model Testing Results

A regression analysis was performed to examine the effects of dimensions of transformational leadership on individual creativity (Table 3). Model 1 shows us that idealized influence positively affects individual creativity with p< 0.05 significance level. Model 2 indicates that inspirational motivation has positive effect on individual creativity p <0.05 significance level. Also, Model 3 shows us that intellectual stimulation positively affects individual creativity with p< 0.01 significance level. This shows us that hypothesis 1 is also confirmed correct. R² results show us in what degree the variables of our model are related to individual creativity.

Table 3. The effects of the Dimensions of Transformational Leadership on Individual Creativity

<table>
<thead>
<tr>
<th>Independents</th>
<th>Individual Creativity Model 1</th>
<th>Individual Creativity Model 2</th>
<th>Individual Creativity Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>t</td>
<td>β</td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>.316</td>
<td>3.12**</td>
<td>.163</td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td></td>
<td></td>
<td>.097</td>
</tr>
<tr>
<td>Individualized consideration</td>
<td>.69</td>
<td>.67</td>
<td>.008</td>
</tr>
<tr>
<td>Idealized influence</td>
<td>.176</td>
<td>1.72**</td>
<td>.907</td>
</tr>
<tr>
<td>Model F</td>
<td>7.89</td>
<td></td>
<td>9.20</td>
</tr>
<tr>
<td>Model R²</td>
<td>0.86</td>
<td></td>
<td>0.64</td>
</tr>
</tbody>
</table>
*Significant at 0.05 (one tailed)
**Significant at 0.01 (one tailed)

Conclusion and Implications

The organizational behaviour literature demonstrates the leader as an influence factor towards the followers’ attitudes and behaviours. Accordingly, the aim of this study was to investigate the relationship between transformational leadership and individual creativity. The results are in line with the previous research suggesting followers’ individual perceptions of transformational leadership are related to their individual creativity (Shin and Zhou; 2003; Gümüşlüoğlu and Ilsev; 2009, Sosik et al; 1998).

Our findings suggest that transformational leadership behaviours are an important mechanism in the development of individual creativity by activating the employee with intellectual stimulation. By intellectual stimulation, leaders are developing a vision and inspiring followers to generate creativity. Results of the study suggest that transformational leadership style may be appropriate for certain exploitative activities that involve challenging assumptions, taking risks, and approaching problems in new ways. The findings also indicate that regarding Bass’ (1985) four dimensions of transformational leadership, intellectual stimulation is the most powerful dimension that facilitate individual creativity. Moreover, the overall relationship between intellectual stimulation and creativity still remained positive when other dimensions are included to the model.

The results showed a positive link among inspirational motivation, idealized influence and individual creativity. However this positive relationship was significantly reduced by intellectual stimulation. This finding clearly makes an emphasis on intellectual stimulation in leadership style if the concern is creativity. Thus, in the current work environment, which stresses adaptation to change, leaders should allocate more time to think how they can motivate staff to think and act creatively. Consequently, our results indicate that organizations can facilitate their employees’ creativity by enhancing managers’ transformational leadership style.

The present study has some limitation like all studies. First, the generalization of our findings may be limited due to low sample size. Second, there may many other variables that lead to creativity not only transformational leadership such as organizational culture, psychological empowerment, support for creativity and innovation, and so on might be
profitable. Future studies should be based preferably on these variables. The final limitation from a methodological perspective concerns the self-report surveys. In this study, a self-report was used to measure the results which could be limited by a socially desirable response. However, the use of self-reporting measures is neither new nor unacceptable.

References


