FACULTY MEMBERS' PERCEPTION OF LEADER-MEMBER EXCHANGE QUALITY AND CREATIVE BEHAVIOUR

B. Cagla Garipagaoglu*

Abstract

Despite the fact that creativity has become a subject of interest that received a considerable attention in recent years, there is still a lack of research regarding creativity in the field of higher education. Therefore, as an attempt to fill this gap in higher education literature and to examine the relationship between the faculty members' perception of leader-member exchange (LMX) quality and the self-perceived creative behavior in higher education, a case study was carried out at a large foundation university in Turkey. The study also determined the level of faculty members' self-perceived creative behavior at the workplace, and investigated how it differs with respect to some variables. The findings of the study showed that there was a significant positive relationship between high-quality LMX and creative behavior.

Keywords: Creative behavior, leader-member exchange, case study, higher education

* Bahcesehir University, Istanbul, Turkey

Introduction

Progress towards a knowledge-based society and economy strictly requires higher education institutions to put the issue of creativity at a premium. Higher education institutions must ensure that the future generations are well-equipped with the necessary competencies and an appropriate mindset that allow them to cope with the complex problems of the future that requires creativity, and an open-mindset (European University Association, 2007). Yet, the higher education cannot accomplish to meet these highly ambitious goals unless the faculty members can demonstrate creativity at their own work. Considering the role of higher education in creating wealth though the development of a knowledge-society, it is evident that providing a rich and a stimulating higher education experience that encourages creativity should be the one of the main responsibilities of faculty members. Yet, making sure that the faculty members are engaged in creative behavior should be a part of the university administrators' job description.

Theoretical Background

Given the current difficulty in anticipating the future change in our world of increased complexity and interconnectedness, nurturing employee creativity is gradually becoming a greater part of managers' job. Literature into creativity reveals that creativity-the generation of not only novel but also useful ideas to the organization- (Oldham & Cummings, 1996), is highly critical for the survival and competitiveness of any organization (Amabile, 1997; Zhichao & Cui, 2012).

Considering the importance of creativity, numerous scholars have investigated the nature of creativity and the means to enhance it (Lee, Scandura, Kim, Joshi, & Lee, 2012). While a widespread scholar agreement has been found on the growing need for creativity studies in organizations to help them better adapt to the changes taking place all around them, a little consensus has been observed on how management can facilitate, sustain, and enhance creativity of organizational members (Tan, 1998). Thus, recent research regarding creativity focused on investigating the social/contextual antecedents that foster the creativity of employees in organizations (e.g., Atwater & Carmeli, 2009; Lee et al, 2012; Mathisen, 2011; Zhichao & Cui, 2012). However, the processes by which leaders can influence and energize the creative workforce behavior have still been understudied, and not yet fully understood (Amabile, Shatzel, Moneta, & Kramer, 2004; Atwater & Carmeli, 2009; Mumford, Scott, Gaddis, & Strange, 2002). Moreover, even fewer studies have been conducted on how creativity can be enhanced within and by academia (European University Association, 2007). Considering the influence of faculty members on the future workforce, creativity in universities seems to be especially important for the education of highly qualified, well-versed and flexible workforce who can better adapt to the demands of changing market conditions.

Leader-member exchange (LMX) quality, on the other hand, seems to be one of the most important factors that can have a significant effect on employee creative behaviour (e.g. Atwater & Carmeli, 2009). Yet, the relationship between LMX quality and employee creativity in higher education context has never been studied before. Given the key role assigned to higher education institutions for the development of a knowledge society (European University Association, 2007), this seems particularly surprising. Therefore, there is a need for studies investigating the relationship between leader-member exchange (LMX) quality and creative behaviour particularly in higher education. In an attempt to address this call, this study aims to make a further contribution to the creativity literature by identifying and clarifying the role of LMX on the faculty members' creative workplace behaviour in higher education.

Employee Creative Behaviour

As put forward by Jackson (2006), creativity is important to the inventiveness, adaptability and productivity of an individual, and to the prosperity and functioning of organizations and more generally to the health and prosperity of society and economy. "Creative work can be generated by employees in any job at any level of any organization" (Rice, 2006). Creativity is not an outcome but an ongoing process (Amabile, 1988; Drazin et al., 1999 as cited in Rice, 2006). Intrinsic motivation is one of the most important drivers of creativity at work (Amabile & Gryskiewicz, 1987 as cited in Rice, 2006). Yet, there are many other factors that may account for the creative behaviour at the workplace.

For a long time, majority of creativity researchers focused on the various characteristics of individual employees (e.g. the background, individual values, personality, level of intrinsic motivation, cognitive style orientation and work style and etc.) as the source of creative employee behaviour, and how creative employees differ from non-creative employees (Atwater & Carmeli, 2009; Tierney, Farmer & Graen, 1999). However, this line of thinking was "both limited and limiting" (Amabile, 1997, p.42) as it does not take into account the contextual dimensions that may be responsible for the creativity in the workforce (Atwater & Carmeli, 2009). Recently, a new line of research and thinking has flourished in creativity studies, as the researchers notice and appreciate the importance of contextual factors in influencing creative employee behaviour (Atwater & Carmeli, 2009). As a result, many researchers and practitioners have turned their attention to these contextual factors and how these factors influence and awaken creativity of employees in the workplace - chief among them is the leadership.

Leader-Member Exchange Quality (LMX)

The LMX theory occupies a unique position in the leadership literature because of its focus on the dyadic relationship between supervisors and subordinates rather than one-way communication from supervisors to subordinates (Graen & Scandura, 1987; Genc, 2010). According to LMX theory "leaders in groups maintain their positions through a series of tacit exchange agreements with their members" (Barman, 2009, p.56). Barman argues that "leaders give the promise of power and benefit in exchange for dedication and loyalty" (2009, p.56). LMX theorists put forward that leaders may develop very different exchange relationships with different members of the same work unit ranging from a low quality to high quality (Dansereau, Graen, & Haga, 1975; Genc, 2010). While a high-quality relationship is characterized by mutual trust and respect between the leader and the followers (i.e., the in-group), a low-quality relationship (i.e., the out-group) is characterized by the mere satisfaction of contractual obligations, one-way downward communication, and lack of mutual goals (Deluga, 1992; Gerstner & Day, 1997). The research related to LMX shows that higher quality LMX result in more positive organizational outcomes. In particular, high quality LMX relationships have been found to be linked to creative performance (Scott & Bruce, 1994; Tiearney, Farmer & Graen, 1999). Furthermore, up-to-date review of literature reveals that the more the employee feel accepted, supported and welcome by the leader and its inner circle, the more he or she will feel empowered, motivated, and psychologically safe about engaging in job-related risk-taking and creative behaviours (Gomez & Rosen, 2001; Janssen, de Vries & Cozijnsen, 1998; Schyns, Paul, Mohr, & Blank, 2005).

The Research Model and Hypothesis

The research model which guided the study is shown in Figure 1. As it can be seen, the model proposes a relationship between leader-member exchange quality relationship and employee creative behaviour.

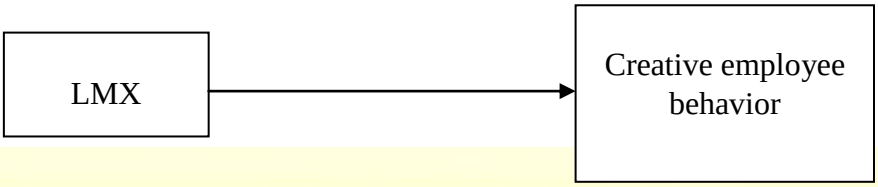

Figure1. Research model (Relationship between LMX and Creative Behaviour)

Hypothesis1: There is a significant and positive relationship between LMX and Creative Employee Behaviour.

Research Methodology

In this study, a case study was carried out to collect the data required to test the relationship between LMX quality and employee creative behaviour. The type of research design is 'hypothesis testing', and it is a cross-sectional research study.

Sampling and Data Collection

A typical case sampling method was employed in the study. Data was collected from the faculty members of a typical, large foundation university located in Istanbul, Turkey. Faculty members from different disciplines participated into the study. Data was collected through a survey method. The survey was administered by sending an email to the addresses of all the prospective respondents. E-mail addresses of the participants have been accessed from the university corporate directory with the permission of the university in question. In the e-mail, respondents were asked to click on a link which connects them to an online survey created by the researcher. The data collection was anonymous and there was no incentive for filling out the questionnaire. Administering the entire questionnaire online took about only five minutes. Data from seventy three respondents were obtained in total with a response rate of 20.85%.

Data Collection Instruments

The survey used for the study included two different measurement instruments, and a section which required respondents to answer some demographic questions.

Leader-member exchange - Multi Dimensional Measure (LMX-MDM) scale.

Perceived LMX quality of faculty members was assessed by Liden & Maslyn (1998) 12-item LMX-MDM scale. It has been noted that because the scale has broader domain coverage, it can better reflect a subordinate's assessment of the leader-subordinate relationship quality rather than one dimensional measures of LMX (Liden & Maslyn, 1998). The scale presents four-factor structure including affect, loyalty, contribution, and professional respect. The items developed for the scale required respondents to rate their relationship with their leaders on a seven-point Likert type scale ranging from 1 "strongly disagree" to 7 "strongly agree". Example of items

include: “I like my supervisor very much as a person”, “My supervisor is the kind of person one would like to have as a friend”, “My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question”, and “I am impressed with my supervisor‘s knowledge of his/her job”. The scale is translated into Turkish by Genc (2010), and instead of seven-point Likert type response format, it has been used in the five-point Likert type response format ranging from 1 ‘strongly disagree’ to 5 ‘strongly agree’. The total scale score ranges from 12 to 60 with higher scores representing higher leader-member exchange quality. The Cronbach alpha internal consistency coefficient of the scale is found to be as 0.93 which demonstrate a very high reliability (Genc, 2010).

Employee Creative Behavior (ECB) scale.

Rice’s (2006) Employee Creative Behaviour (ECB) Inventory was adapted into Turkish by the researcher using a combination of back translation and parallel translation. The researcher also made some minor changes so that the scale was applicable in university settings. The scale was composed of nine items to be answered on a Likert type scale ranging from 1 ‘strongly disagree’ to 5 ‘strongly agree’. The employee creative behavior was measured by the use of employee self-rated items. The higher the total score is the higher the employee’s perception about his/her creativity related behavior at the workplace. Rice (2006) defined the employee creative behavior as “employee’s perceptions and beliefs about his/her creativity related behavior in the workplace” (p. 234) and operationalized it based on the work of some other researcher such as Ganesan and Weitz (1996), Amabile, Conti, Coon, Lazenby, and Herron (1996), Mumford and Gustafson (1988), and Oliver and Anderson (1994). The ECB scale was found to have a satisfactory reliability of 0.71 (Rice, 2006).

Data Analysis

Data analysis was handled using IBM SPPS Statistics 19. The analysis included reliability analyses, descriptive statistics, t-test, one-way ANOVA, and Pearson correlation.

Validity and Reliability Analyses

The content validity of the measurement instruments used in the study was established by the use of scales which were adapted from the prior studies. The construct validity is verified by using confirmatory factor analysis. While the confirmatory factor analysis confirmed the four-factor structure of the LMX-MDM scale, it indicated a one-factor structure for ECB scale. Reliability analyses were conducted by the use of Cronbach’s alpha. Cronbach Alphas for the employee behaviour scale and the LMX-MDM scale were found to be 0.742 and 0.939 respectively for the sample studied in this research. Because the measurement instruments had reliabilities over 0.70, they were considered as highly reliable (Hair, Anderson, Tatham, & Black, 2006, p.137) and thus accepted for further use.

Findings

The main purpose of this study was to investigate the relationship between creative behaviour of faculty members and leader-member exchange quality at the university. The study

also determined the level of creative workplace behaviour of faculty members as it is perceived by the faculty members themselves and investigated how the creative workplace behaviour of faculty members differed with respect to some variables. The descriptive statistics of the employee creative behaviour scale are given in Table 1.

Table 1

Descriptive statistics of Creative Employee Behaviour Scale

Items	Mean	Sd.
My boss feels that I am creative in my job	3.78	0.93
I experiment with new approaches to doing my job	4.36	0.59
I am on the lookout for new ideas from all the people with whom I interact as part of my job	4.26	0.80
I believe that I am currently very creative in my work	4.01	0.72
I try to be as creative as I can in my job	4.31	0.64
I would like to learn some new skills that will help me to be more effective at work	4.53	0.50
When I perform well, I know it's because of my own desire to achieve	4.37	0.75
When new trends develop in my workplace, I am usually the first to get on board	3.79	0.80
My work is so personally rewarding for me that I am indifferent to special incentives provided by the management	2.60	1.13

The sample mean of creative behaviour for faculty staff was found to be 36.03 and the standard deviation was 4.02. According to the ECB scale, the mean score which is above 27 indicates a high level of creative behaviour at the workplace, while the mean score which is lower than 27 indicates a low level of creative behaviour at the workplace. Therefore, the sample mean of 36.03 indicated that our sample had a high level of creative behaviour at the workplace.

The study also investigated how the level of faculty members' creative behaviour differed with respect to some variables including gender, class, marital status, total work experience, current work experience, the length of time worked with the supervisor, faculty, and the evaluation of the faculty size by the faculty members in terms of the number of academic personnel. Significant differences were found in the level of creative employee according to gender, the length of time worked with the supervisor, and the evaluation of the faculty size in terms of the number of academic personnel working. No significant difference, on the other hand, was found in the level of creative employee behaviour with respect to other variables investigated in the study.

An independent sample t-test showed that there was a significant difference (t (71) =2.391, p=0.019) between the mean scores of male and female subjects in terms of creative behaviour. The creative employee behaviour mean score of male subjects (m=37.33, sd=3.83) was significantly higher than that of the female subjects (m=35.12, sd=3.95). One-way ANOVA showed that there was a significant difference (F (3, 69) =4.211, p=0.009) between the subjects' creative behaviour in terms of the length of time spent with the supervisor. Tukey HSD post-hoc analyses revealed that the mean creative behaviour score of faculty members who were working

with their current supervisor for 3 to 5 years (m=33.50, sd=2.91) was significantly lower than the scores of members who were working with their current supervisor for 6 to 9 years (m=37.85, sd=34.12), and those of the members who were working with their current supervisors for more than 10 years (m=42.00, sd=1.41). In terms of the perceived size of the faculty in terms of the number of academic personnel working for it, research findings indicated that the faculty members who perceived their faculty as a medium-scaled faculty in terms of the number of academic personnel seemed to have higher scores (m=37.26, sd=3.45) on creative employee behaviour scale compared to faculty members who perceived their faculty as a small-scaled one (m=32.33, sd=2.87).

The study also determined the level of LMX quality and investigated how it differed with respect to some variables. Table 2 below presents the descriptive statistics of the LMX-MDM scale.

Table 2
Descriptive statistics of LMX-MDM Scale

Items	Mean	Sd.
I like my supervisor very much as a person	3.68	1.12
My supervisor is the kind of person one would like to have as a friend	3.53	0.94
My supervisor is a lot of fun to work with	3.86	0.96
My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question	3.40	0.99
My supervisor would come to my defense if I were —attacked by others	3.67	0.89
My supervisor would defend me to others in the organization if I made an honest mistake.	3.77	0.86
I do work for my supervisor that goes beyond what is specified in my job descriptions	3.83	0.99
I am willing to apply extra efforts, beyond those normally required, to meet my supervisor's work goals	3.83	1.00
I do not mind working my hardest for my supervisor	3.40	1.08
I am impressed with my supervisor's knowledge of his/her job	3.74	0.89
I respect my supervisor's knowledge of and competence on the job	4.10	0.90
I admire my supervisor's professional skills	3.96	0.95

The sample mean of faculty staff's perception of LMX was found to be 44.78 and the standard deviation was 9.01. According to the LMX-MDM scale, the mean score which is above 36 indicates a high level of LMX quality, while the mean score which is lower than 36 indicates a low level of LMX quality at the workplace as it perceived by the employees. Therefore, the sample mean of 44.78 indicated that our sample perceived a high level of LMX quality at the workplace. Furthermore, the mean score for the item 11 "I respect my supervisor's knowledge of and competence on the job" was found to be the highest (m=4.10, sd=0.90) among the scale items and the lowest (m=3.40, sd=1.08) for the item 9 "I do not mind working my hardest for my supervisor".

An independent sample t-test comparing the male faculty members' perception of LMX quality and the female faculty members' perception of LMX quality found a significant difference between the means of the two groups (t(71)=3.153, p=0.002). The male faculty members' perception of LMX quality (m=48.53, sd=6.85) was significantly higher than that of the female faculty members (m=42.16, sd=9.46). One-way ANOVA test was also performed to see whether there is significant difference between the subjects' perception of LMX quality in terms of age. A significant difference was found (F(3,69)=2.925, p=0.040). Tukey HSD post-hoc analyses revealed that the older faculty members' perceptions of LMX quality (m=49.62, sd=7.61) were significantly higher than the those of younger ones (m=39.21, sd=9.95).

Finally, the main purpose of this study was to investigate the relationship between the creative employee behaviour of faculty members and the LMX relationship quality at the university. With this in mind, Pearson correlation coefficient was calculated in order to understand the direction and the strength of this relationship. Pearson r=0.243 (p=0.038) indicated a significant, positive but a somewhat weak relationship between the creative employee behaviour of faculty members at the university and the LMX quality.

Discussion and Conclusion

LMX quality was found to be significantly and positively related with the employee creative behaviour. Faculty members who perceived a higher LMX quality were rated themselves as more creative at the workplace compared to faculty members who perceived a lower LMX quality. This finding also confirmed the study done by Tierney et al.'s (1999), and Lee et al.'s (2012) who also reported a significant and a positive relationship between employee creative behaviour and LMX quality. The findings of the study also supported the view that contextual factors such as social factors and specifically the supervisors' support can play a major role in enhancing employees' creative behaviour at the workplace (Oldham & Cummings, 1996). Since creative ideas may be at odds with organizational routines (Sternberg & O'Hara, 1999) and may not be favoured due to structural inertia in an organization, strong support from supervisors based on mutual trust and support may work as a facilitator in generating more creative ideas and increase employee creative behaviour. It is highly critical for an employee to get encouragement and support from his/her supervisor when he or she comes up with a creative idea. Knowing that his/her idea will get a fair-hearing, and the supervisor will act as a sponsor or a shield to promote the idea throughout the organization and allocate resources to it, might help increase the number of people with more promising ideas and enhance creativity at work.

Other findings of the study indicated that the male faculty members were exhibiting more creative behaviour compared to female faculty members. Similarly, male subjects also felt that they had higher-quality relationships with their super-ordinates as it is compared to their female colleagues. This might probably be explained by the traditional roles and patterns of expectation. Administrative positions in Turkish higher education traditionally have been the turf of man particularly, and because of the Turkish male solidarity, men generally tend to form closer relationships with their male super-ordinates. Therefore, male faculty members might feel more confident while engaging in creative behaviours at work as they know that they will be supported by the male dominant upper echelon. The study also showed that the faculty members who were working with the same leader for longer years seemed to be more engaged in creative behaviour at work compared to those who were working with their leader for a rather short time. The explanation for this probably lies in the fact that as the time spent with the leaders increases; the

employees might tend to get more confident and less at risk when they are engaged in creative behaviour at work. On the other hand, when the leader-member relationship is relatively new, employees may feel themselves at risk and unsafe while engaging in creative behaviours at work. Finally, the research findings indicated that the faculty members who perceived their faculty as a medium scaled one scored significantly higher on the ECB scale compared to those who perceived their faculty as a small-scaled one. This finding might be explained by the fact that because the relatively smaller faculties generally have less power at the university-wide level compared to larger ones; the members of smaller faculties might tend to see creative behaviours riskier and less rewarding.

Limitations and Suggestions for Future Research

There are several limitations in the study that needs some caution in interpreting the findings. First of all, our research design does not allow us to claim any causal relationship between LMX quality and creative behaviour at the workplace. Therefore, future studies should use experimental and longitudinal designs to better elaborate the relationship and test for the causality. Second, the use of self-rated measure of creative behaviour might not reflect the actual creative behaviour at the workplace fully. Therefore, future research might support the use of employee self-reported measure of creative behaviour with complementary on-site observations or by the use of leader-rated employee creative behaviour. Third, the generalizability of the results is restricted only to the large foundation universities operating in Turkey.

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