RELATIONSHIP OF TRANSFORMATIONAL LEADERSHIP, PSYCHOLOGICAL WELL-BEING AND SELF-EFFICACY: A MEDIATION ANALYSIS IN UNIVERSITY FACULTY

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ABSTRACT

Well-being of academics of higher education sector plays an important role in improving the standard of education and quality of educational experiences of students. With the increasing prominence of phenomenon of individual well-being at workplace, researchers are focusing on identifying the mechanisms through which psychological well-being of academics can be enhanced. This study examines how prevalence of transformational leadership style influences psychological well-being directly and indirectly through exploring the mediating role of self-efficacy. The model was tested by employing Hierarchical Multiple Regression on survey responses collected from academics employed in three public and private sector universities of Lahore. Results from 180 responses indicated that relationship between transformational leadership and psychological well-being is fully mediated by self-efficacy. The results support and add to the positive effects of transformational leadership style interconnected with psychological well-being. Interventions to improve psychological well-being of teachers have also been presented.

Keywords: Mediation, Psychological Well-being, Self-Efficacy, Transformational Leadership

1) INTRODUCTION

Quality in education plays a pivotal role in growth and development of a society. Consequently, higher education sector of Pakistan has undergone certain reforms in last two decades. In 2002 HEC (Higher Education Commission) was established with a perspective to bring paradigm change in higher education system of Pakistan (“HEC Annual Report 2012-13”, 2013). With the increasing attention and reforms in this sector, teachers are not only responsible for teaching students, but they also have
to undertake the duties of academic development and scientific research. For the development of this sector, it is important that the university teachers are capable to take independent decisions, are rich in innovation and are free from physical and mental stress. Leadership style of head of departments is an integral factor that can have a positive and profound impact on psychological well-being of the teachers. The main purpose of this article is to provide empirical evidence that behaviors exhibited by transformational leaders can contribute positively to teachers’ psychological well-being by enhancing their self-efficacy beliefs.

According to Burns (1978) a transformational leader is one who goes beyond one’s own self-interest, places his trust and confidence in his employees and motivates them that organizational goals can be achieved. Although, much of research in last decade has been focused on understanding the nature of transformational leadership, comparatively lesser is known about its impact on individual’s psychological well-being and the mechanisms through which transformational leaders enhance the performance of the followers (Sivanathan et al., 2004).

The concept of well-being gained increased attention under positive psychology movement, with the agenda that research should be concerned with developing empirical knowledge pertaining to underlying factors of positive human functioning instead of focusing attention on the negative (Seligman and Csikszentmihalyi, 2000). Since inception of the field of positive psychology, one of the most prominent and important concept of positive psychology research has been well-being (Lee and Carey, 2013). Most of the researches in positive psychology have used the concept of subjective wellbeing for evaluating the happiness/suffering continuum in human experiences. Deriving from the work of Aristotle that wellbeing not merely refers to acquiring pleasure, Ryff (1989a) introduced the concept of psychological wellbeing in terms of living a fulfilling life through learning and personal growth. One of the factors that have an impact on an individual’s well-being is social relationships in the workplace. Social relationships, especially supervisor-subordinate interaction can significantly impact how one feels about himself and the workplace. How a leader behaves with his subordinates has strong effect on employee perception about a supportive workplace (Cherniss, 1995).
Researchers have indicated transformational leadership is positively related to person’s self-efficacy beliefs. Transformational leaders help their employees to strengthen the belief in their abilities to successfully perform a task (Aggarwal and Krishnan, 2013). Bandura (1977) defined self-efficacy as one’s belief that he/she has the knowledge, skills and abilities required to accomplish a task or objective. Transformational leader enhances self-efficacy of his followers. They exercise verbal persuasion and mastery experience to persuade their employees that they have the capability to achieve the organizational objectives (Bandura, 1977). Self-efficacy is also linked with individual health and optimal functioning. Higher self-efficacy is related to improved well-being, better physical conditions and recovery from chronic diseases and improved self-esteem (Bisschop et al., 2004, Kuijer and de Ridder, 2003). In addition, lower self-efficacy is related to increased stress (Kashdan and Roberts, 2004).

Since studies have indicated that self-efficacy is associated with transformational leadership and well-being, therefore this study aims to expand the existing literature. Researchers have established relationships between psychological well-being and transformational leadership in western societies (Kelloway et al., 2012, Sivanathan et al., 2004). However, research to study the relationship between these two constructs has not been conducted in Pakistani context. Therefore, this study supports and extends the findings of western societies on the relationship between transformational leadership and psychological well-being to Pakistani societies.

1.1) Transformational Leadership

The concept of transformational leadership is one of the most important and influential concepts of leadership developed in the last few decades (Bass, 1985, Burns, 1978). Transformational leadership “occurs when one or more persons engage in such a way that leaders and followers raise one another to higher levels of motivation and morality” (Burns, 1978, p.20). Transformational leader can raise his followers’ to higher level needs because it requires higher levels of dignity, morality and self-esteem to perform this kind of leadership (Burns, 1978). Bass (1985) advanced the work of Burns. According to Bass (1985) a transformational leader is “one who motivates us to do more than we originally expected to do” (Bass, 1985, p.20). Transformational leaders accomplish better-
quality and superior outcomes by adopting following four behaviors: 1) Idealized Influence 2) Intellectual Stimulation 3) Inspirational Motivation 4) Individualized Consideration (Bass, 1999).

*Intellectually stimulating* leaders are aware of the need to change with time. They challenge the status quo of an organization and encourage the individuals to focus their attention on creativity, rationality and careful problem-solving. Leaders encourage their followers to think of new ways and approaches to address a problem (Bass and Riggio, 2006). Leaders who display *inspirational motivation* encourage their employees to accomplish their personal and organizational objectives. The leader does so by talking optimistically and clearly communicating his expectations about the future. This in turn, makes the work meaningful and challenging to the followers and it enhances their motivational levels (Bass and Riggio, 2006). *Idealized Influence* occurs when transformational leaders exhibit certain behaviors due to which they are trusted and respected by their followers. The followers view their leaders as having confidence, determinism and extraordinary qualities and want to imitate the actions of their leaders (Bass and Avolio, 1993). Idealized leaders do not use their power for their self-interest, they set challenging goals for their followers and display high values for moral and ethical conduct (Popper et al., 2000). Leaders who exhibit *individualized consideration*; they act as a mentor to their employees and encourage two-way communication with the followers; listen to their problems and provide tasks to develop their employees (Bass and Riggio, 2006).

**1.2) Psychological Well-Being**

The concept of well-being has been studied extensively in positive psychology and distinct definitions and measures have been developed (Diener, 1984, Ryff, 1995, Diener et al., 1999, Seligman, 2011). Researchers have adopted two distinct approaches named hedonic and eudemonic well-being to define well-being. The hedonistic view of well-being is that happiness is the polar opposite of suffering. Hedonists believe that purpose of life is maximization of pleasure over pain (Ryan and Deci, 2008). In contrast of hedonism, the concept of eudemonism focuses on living a flourishing and fulfilling life which is characterized by personal growth and self-realization (Ryan and Deci, 2008).The concepts of hedonism and eudemonism are interconnected. When people perform
such activities that cause satisfaction and a sense of achievement among them, it also gives them hedonic pleasure (Waterman et al., 2008).

Concept of eudemonia stemmed from work of psychologists such as Maslow’s (1971) concept of self-actualization and Jung’s (1933) concept of individuality. Since then researchers have attempted to develop measurable frameworks for defining eudemonia such as Diener’s (1984) model of subjective well-being (SWB) and Ryff’s (1989) model of psychological well-being. Ryff (1995) defined psychological well-being as “striving for perfection that represents the realization of one’s true potential” (Ryff, 1995, p.100). The concept of psychological well-being is measured through six dimensions named autonomy, purpose in life, self-acceptance, personal growth, environmental mastery and positive relationships with others. The multi-dimensional model is derived from several psychological theories and concepts such as Allport’s model of maturity, Maslow’s concept of self-actualization, Jahoda’s ideal mental health approach and Roger’s concept of fully functioning person (Keyes and Ryff, 1998).

According to Ryff and Keyes (1995) autonomy refers to how individuals survive independently. A person who scores high on psychological well-being scale is someone who is self-regulating and independent. A person who experiences positive relationship with others is someone who is able to build affectionate and trusting relationships with other people (Ryff and Keyes, 1995). Purpose in life refers to whether a person believes in living a meaningful life (Ryff and Keyes, 1995). Self-acceptance refers to how a person accepts all good and bad qualities of his personality, is pleased about the past experiences and has a positive attitude towards life and self (Ryff and Keyes, 1995). Environmental mastery refers to ability to control the surrounding environment. A person who experience personal mastery feels competent in managing his life activities (Ryff and Keyes, 1995). Personal growth refers to an individual’s ability to learn and develop with time. A person considers himself as growing and develops a sense that he has improved over time (Ryff and Keyes, 1995).

1.3) Self-Efficacy

The concept of self-efficacy was presented by Albert Bandura as a component of his Social Cognitive Theory (Bandura, 1989). This theory is based on the idea that people learn by observing others, even in the
absence of direct reinforcement (Bandura, 1986) and proposes a model of triadic reciprocal determinism which suggests that personal (cognitive factors such as beliefs, emotions and personality characteristics); behavioral and environmental factors (person’s physical and social surroundings) play a vital role in an individual’s learning (Bandura, 1989).

An important personal factor of self-efficacy is essential for self-regulated learning (Bandura, 1986). Self-efficacy refers to “beliefs in one’s capabilities to organize and execute courses of actions required to produce given attainments” (Bandura, 1997, p.3). The strength of self-efficacy beliefs in an individual determines whether individuals will instigate a certain behavior, how much effort they will put to accomplish a certain task and whether this effort will remain persistent in the long run (Bandura, 1997). When self-efficacious people are given difficult work they take it as a challenge and put in all their efforts to complete the assigned tasks. On contrary, people with low self-efficacy perceive tasks as difficult to accomplish and have doubt that they do not have necessary skills and abilities to produce desired outcomes. As a result, people with low perceived self-efficacy are less engaged in their work and are easily stressed (Singh and Udainiya, 2009).

1.4) Relationships among the constructs

Self-efficacy beliefs are found to be correlated to human health, motivation and ability to face difficulties (Bandura, 2001), better quality of life, recovery from chronic diseases (Kuijer and de Ridder, 2003, Bisschop et al., 2004) and high quality social relationships (Macek and Jezek, 2007). Self-efficacy beliefs influence individual goal-setting and level of effort and persistence while facing challenging tasks. Employees with high-self-efficacy have confidence that they can perform well while handling new and difficult tasks. They exert greater effort and show determination to achieve positive results (Lunenberg, 2011). Self-efficacy also leads to personal growth. An individual with confidence in his abilities to perform well is more likely to engage in activities that challenges his abilities and expand his horizons, leading to increased self-awareness. This will ultimately result in improved self-regulated learning (Gravill et al., 2002). Self-efficacious individuals tend to seek jobs that give them autonomy and responsibility. A study by Mierlo et al., (2006) also yielded similar results that while working in teams, individuals with high self-efficacy
who also received support from their supervisors and peers were able to take independent decisions.

Previous studies have indicated that transformational leaders play an important role in enhancing the self-efficacy beliefs of the followers. Transformational leaders provide challenging goals to the individuals’ to polish their skills and to improve the self-confidence of the employees. They encourage employees to bring new ideas and place their confidence in the employees that desired goals will be met (Tims et al., 2011). Transformational leaders practice verbal persuasion and exercise mastery experience which has a positive impact on employees’ self-efficacy (Aggarwal and Krishnan, 2013). Transformational leaders view their employees as individuals having different needs and abilities. By paying attention to each individual, by giving proper and timely feedback and by building an employee’s strengths, transformational leaders are able to improve an employee’s self-belief (Kirkpatrick and Locke, 1996).

Range of behaviors exhibited by transformational leaders such as showing consideration, giving attention to individual employees and giving autonomy to perform different tasks is positively related to employee psychological well-being (Gilbreath and Benson, 2004). According to a research conducted by Hetland et al., (2010) transformational leaders positively influence the employees’ perceived work autonomy because such leaders give their employees independence to make decisions. Transformational leaders encourage their followers to engage in creative thinking and give them independence to implement their decisions. Thus, employee participation is an integral part of transformational leadership (Kirkman et al., 2009). Transformational leaders also give attention to individual needs of employees and work to develop their strengths. Leaders provide support and empathy which they need for their well-being and in doing so, they develop positive relationships with their followers (Sivanathan et al., 2004).

Based on the findings about possible relationships among the variables, following hypotheses are formulated:
2) HYPOTHESES

H1: There is a positive relationship between transformational leadership and psychological well-being.
H2: There is a positive relationship between transformational leadership and self-efficacy.
H3: There is a positive relationship between psychological well-being and self-efficacy.
H4: The relationship between transformational leadership and psychological well-being is mediated by self-efficacy.

3) METHOD

3.1) Participants

The sample of the study consisted of teachers working in two public sector universities and one private sector university in Lahore. A total of 180 teachers participated in completing the survey instrument. The demographic section of the survey included the categories of age, gender, department, position held and number of years in current position. The highest percentage of teachers (48%) indicated that they were between 24 and 33 years of age with age breakdown as follows: 34-43 (29%), 44-53 (8%), 54 and above (7%) (8% did not respond). Out of 180 respondents, 49 percent were male and 47 percent were female (coded 1-2 respectively) (4% did not respond). Under the category position held majority of the participants were lecturers (42%) followed by assistant professors (37%), professors (4%), research associates (3%), associate professors (3%) and visiting faculty (2%) (9% did not respond). All these variables were employed as control variables in explaining the impact of predictor variable/s on dependent variable.

3.2) Measures

Structured questionnaire was employed to gather the responses. Respondents were asked to rate the statements by using a five point Likert scale which ranges from 1= “strongly disagree” to 5= “strongly agree”.

Transformational Leadership: Components of transformational leadership were measured through the twenty (20) statements, taken
from Multifactor Leadership Questionnaire (MLQ-5X) short form developed by Bass and Avolio (1995). Cronbach’s Alpha for this scale was 0.95.

**Psychological Well-Being:** The Ryff Scale of Psychological Well-Being (PWB) developed by Ryff (1989a) was used to measure this concept. The mid-length version of the instrument was used which consists of 42 statements. The value of Cronbach’s Alpha for this scale was 0.87.

**Self-Efficacy:** The construct of self-efficacy was measured through the General Self-Efficacy scale (GSE) developed by Schwarzer and Jerusalem (1995). Cronbach’s Alpha value for the 10-item scale was 0.84.

### 3.3) Data collection and response rate

To check the internal consistency of the survey instrument, a pilot study was conducted. Twenty two questionnaires were distributed among the permanent and visiting faculty of one department in the public sector university. Fifteen valid responses were received. The reliability coefficients for transformational leadership, psychological well-being and self-efficacy scales were 0.90, 0.89 and 0.92 respectively. Consequently, 222 questionnaires were distributed among the teachers working in different departments of three universities on basis of convenience sampling. For collection of data, questionnaires were distributed in person among the teachers. Some of the questionnaires were also distributed through e-mail. After receiving the questionnaires, 180 valid responses were used for data analysis. Table 1 shows the frequency of valid responses for each university.

*Table 1: Questionnaires distributed and Response Rate*

<table>
<thead>
<tr>
<th>Universities</th>
<th>Distributed</th>
<th>Received</th>
<th>Valid Responses</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>University 1</td>
<td>142</td>
<td>124</td>
<td>118</td>
<td>87%</td>
</tr>
<tr>
<td>University 2</td>
<td>31</td>
<td>26</td>
<td>18</td>
<td>84%</td>
</tr>
<tr>
<td>University 3</td>
<td>49</td>
<td>44</td>
<td>44</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>222</strong></td>
<td><strong>194</strong></td>
<td><strong>180</strong></td>
<td><strong>87%</strong></td>
</tr>
</tbody>
</table>
Table 1 shows that total 222 questionnaires were distributed in the three selected universities. 194 questionnaires were returned yielding a response rate of 87%. Out of these received questionnaires, 180 responses were valid. During data preparation, each respondent was identified with its university name. Universities 1-3 were coded as 1-3 respectively.

4) RESULTS

Hierarchical multiple regression was employed in this study to analyze the relationship between transformational leadership and psychological well-being directly and indirectly through self-efficacy while controlling for the control variables.

4.1) Descriptive statistics and correlation analysis

Correlation analysis was used to determine the strength and direction of relationship among the variables. Table 2 represents the correlation coefficients of the three variables of the study. There exists a strong positive relationship between psychological well-being and self-efficacy (r=0.50), weak positive relationship between transformational leadership and self-efficacy (r=0.22) and weak positive relationship between transformational leadership and psychological well-being (r=0.23).

\[ \text{Table 2: Means, Standard Deviations and Correlations among Variables} \]

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy</td>
<td>1</td>
<td>.50**</td>
<td>.22**</td>
<td>3.87</td>
<td>.46</td>
</tr>
<tr>
<td>Psychological Well-being</td>
<td>1</td>
<td>.23**</td>
<td></td>
<td>3.66</td>
<td>.37</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td></td>
<td>1</td>
<td></td>
<td>3.71</td>
<td>.69</td>
</tr>
</tbody>
</table>

**: Significant at .01 level of significance

4.2) Hierarchical Multiple Regression

The hypotheses were tested using hierarchical multiple regression. In step 1 control variables (age, gender, position held) were entered, followed by transformational leadership entered in step 2 and self-efficacy entered in step 3.
Table 3 indicates that transformational leadership explained significant variation in psychological well-being ($\Delta R^2 = .07, \beta = .26, p < .05$). It shows that a positive relationship exists between transformational leadership and psychological well-being (Hypothesis 1 supported). Transformational leadership was positively associated with self-efficacy ($\Delta R^2 = .08, \beta = .30, p<.05$) (Hypothesis 2 supported). Psychological well-being had a positive association with self-efficacy ($\Delta R^2 = .24, \beta = .49, p < 0.05$) (Hypothesis 3 supported).

After controlling for mediator, the significant relationship between transformational leadership and psychological well-being became insignificant ($\beta=.13, p>.05$). In addition, the variance accounted by mediated model ($R^2=.26, p<.05$) was more than the variance accounted by direct model ($R^2=.08, p<.05$) (see table 3) which proves that self-efficacy fully mediated the relationship between transformational leadership and psychological well-being (Hypothesis 4 supported). Sobel test was conducted to test the significance of mediation effect. After calculating values of $a=.03$, $b=.40$, $s_a=.01$ and $s_b=.06$, these values were entered in Sobel calculator. Results of Sobel test ($z=2.74, p<.05$) suggest that association between transformational leadership and psychological well-being is significantly mediated by self-efficacy. Transformational leaders have an impact on psychological well-being of teachers and they do so by strengthening their self-efficacy beliefs.
Table 3: Hierarchical Multiple Regression Predicting Psychological Well-Being from Transformational Leadership through Mediation of Self-Efficacy

<table>
<thead>
<tr>
<th>Model</th>
<th>Dependent Variable</th>
<th>Independent Variable (s)</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PW</td>
<td>CVs (i) CVs (ii) CVs + TL</td>
<td>.01</td>
<td>.08*</td>
<td>.26*</td>
</tr>
<tr>
<td>2</td>
<td>SE</td>
<td>CVs (i) CVs (ii) CVs + TL</td>
<td>.02</td>
<td>.10*</td>
<td>.30*</td>
</tr>
<tr>
<td>3</td>
<td>PW</td>
<td>CVs (i) CVs (ii) CVs + SE</td>
<td>.01</td>
<td>.25*</td>
<td>.49*</td>
</tr>
<tr>
<td>4</td>
<td>PW</td>
<td>CVs (i) CVs (ii) CVs + TL + SE</td>
<td>.01</td>
<td>.08*</td>
<td>.13</td>
</tr>
</tbody>
</table>

*: Significant at 0.05 level of significance
CV= Control Variables; TL= Transformational Leadership; PW= Psychological Well-Being; SE= Self-Efficacy
Control Variables: Gender, Age, Position Held

5) DISCUSSION

The results of the study verified that transformational leadership style is positively related to psychological well-being of teachers. These findings are supported by a number of researches which show that when leaders provide autonomy, encouragement and support to their followers; it leads to enhanced psychological well-being (Arnold et al., 2007, Sivanathan et al., 2004, Gilbreath and Benson, 2004). The present study enhanced the previously established linkage between transformational leadership and psychological well-being by introducing the concept of self-efficacy as a mediator. Self-efficacy has been studied in relationship with transformational leadership (Aggarwal and Krishnan, 2013) and well-being (Karademas, 2006) separately, but the combined relationship between these three concepts has not been explored yet. In investigating the mechanisms through which transformational leadership exerts its effect on psychological well-being of teachers working in higher education institutions; results indicated that transformational leaders enhance the self-efficacy beliefs of the teachers which in turn improve their psychological well-being, thus indicating the presence of a
mediation mechanism. It was found that self-efficacy fully mediates the relationship between transformational leadership and psychological well-being.

6) LIMITATIONS

There are some limitations associated with this study that must be discussed. The data was collected from 180 teachers working in three universities. Therefore, results need to be validated with large sample size to enhance the generalizability. The current research has employed the cross-sectional research design that evaluates the relationship between independent and dependent variables and no inferences can be made about causality. Furthermore, the data was collected through self-report questionnaire and is prone to biases inherent to such an approach.

7) RECOMMENDATIONS FOR FUTURE RESEARCH

This research has expanded knowledge about the mechanisms through which transformational leadership affects an individual’s psychological well-being. Future research can focus on other mediating mechanisms such as psychological capital and perceived organizational support. Future studies can demonstrate which specific behaviors of transformational leaders contribute more significantly towards followers’ psychological well-being. According to a research by Bono and Ilies (2006), charismatic leaders show positive emotions which in turn have a positive impact on followers’ mood and their perception about leader’s effectiveness. This opens an additional avenue for researchers to understand how positive emotions exhibited by leaders’ can impact their followers’ psychological well-being.

8) PRACTICAL IMPLICATIONS

Results of this study make several practical contributions. This study provides empirical evidence that transformational leadership is positively correlated to individuals’ psychological well-being directly and indirectly through mediating mechanism of self-efficacy. The results indicate that supervisors must be careful about their behaviors as it influences employees’ psychological well-being. Universities should provide formal training to the head of departments to exert transformational leadership behaviors (communicating a clear vision of the organization, coaching
and mentoring the teachers, encouraging teachers to make decisions and provide creative solutions to problems) which will in turn improve teachers’ psychological well-being. While appraising the results of training programs, universities should monitor how the changed leadership behaviors affect the teachers (for example by collecting data from the teachers about their psychological well-being) rather than only relying on changes in leaders’ behaviors and attitudes. In addition, programs aimed at reducing teachers stress and enhancing their psychological well-being must be introduced in the universities. These programs should not only include the stressed teachers but their supervisors as well. This will improve the effectiveness of such programs, as supervisors can help their subordinates to incorporate the lessons learned during these programs.

REFERENCES


