The Effect of Ethical Leadership on Subjective Wellbeing, Given the Moderator Job Satisfaction (A Case Study of Private Hospitals in Mashhad)

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Research article

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Abstract

Background: The emerging ethical leadership, a novel approach in leadership perspective, has provided the ground for building and promoting individual and organizational effectiveness through prioritizing ethics in organization. The purpose of the study is survey of effect of Ethical Leadership on Subjective Wellbeing, Given the Moderator Job Satisfaction in Private Hospitals in Mashhad

Methods: This research, employing a descriptive-correlational survey design, was conducted in 2015-2016 to examine the probable effect of ethical leadership on subjective wellbeing and job satisfaction (both as the outcome variable and the mediator) among the nurses of private hospitals in Mashhad, Iran. The statistical population included all nurses of private hospitals in Mashhad city (730 nurses, in total). 166 nurses were eventually selected as a sample of respondents by following a simple randomized method. The data were collected with the adapted version of the questionnaire designed by Yang (2014). The validity and reliability of the survey were tested and confirmed. For data analysis, structural equation modeling (SEM) was used.

Results: The results indicated a positive significant relationship between ethical leadership and job satisfaction. Ethical leadership both directly and indirectly affected the subjective wellbeing of nurses through job satisfaction.

Conclusions: The finding suggests that an emphasis on ethics and ethically-oriented leaders in hospitals, enhanced by job satisfaction, can provide a positive climate which can lead to the subjective wellbeing of nurses.

Background

Organizations must have organizational health which is fulfilled through the law or ethics and also effectiveness of ethics to be adopted to the environment and survived. This would be better for long term success of such organizations. Leaders of organizations should be bound to an acceptable morality and be a key source of ethical guidelines for the personnel. Moreover, recent scandals have caused a new interest in getting promoted in topics including Altruism, honesty, empowerment, fairness and justice [e.g., 1, 2]. This led to exploration of ethical leadership concept in the early 20th century [3].

According to theory of social learning, personnel will learn the way of interacting with others through important audiences' behavior imitation and monitoring namely organizations' leaders' [4]. However, experimental experience of this theory specifically about ethical leadership hasn't been evaluated enough [5]. From a social learning perspective, ethical leaders are considered as role models shaping appropriate behaviors and norms in an organization [6]. Ethical leadership in this point of view is defined as the affirmation and promotion of normatively appropriate behavior to followers throughout personal and interpersonal context by two-way communication, reinforcement and decision-making [6, 7, 8, 9]. This leadership style can be conceived in more concrete terms by a triple behavioral dimension: the first key feature is leader's 'fairness,' described as being fair, trustworthy and honest. In other words, ethical leaders
treat others with respect, do not discriminate among others and make fair choices. The second feature is leader’s ‘power sharing’ behavior. Ethical leaders give subordinates a voice, listen to their input, and allow them to take part in decision-making on issues concerning their tasks. Finally, ethical leaders tend to work transparently, clarify expectations, and communicate openly so that followers understand what is desirably expected from them. This aspect of ethical leader’s behavior is labeled ‘role clarification.’ [10].

According to social learning theory, this theory, followers tend to pay attention and emulate the attitudes, values, and behaviors of their ethical leaders because their attractiveness and credibility as role models and source of guidance draw attention to their modeled behavior [6]. Some potential positive consequences of ethical leadership are job satisfaction [e.g., 11, 12, 13, 14], and employee wellbeing [e.g., 15, 16].

Subjective wellbeing, in working and organizational environments, refers to the employee’s perception and evaluation of the quality of (working) life, social and psychological functioning in those environments [17]. Prior research gives evidence on the association between leader’s behavior and employee’s wellbeing [e.g., 18, 19], and the impact of leadership styles, including transformational, virtuous leadership and ethical leadership, on the employee’s subjective wellbeing [e.g., 16, 20, 21]. As the Conservation of Resources (COR) theory suggests, people strive to retain, protect, and build resources and what is threatening to them is the potential or actual loss of these valued resources; resources, then, are the single unit necessary for understanding stress. COR theory states that resources, such as ethical leadership, help employees to obtain more resources. This starts a positive spiral of resources, which can positively influence wellbeing. Ethical leaders can provide job resources by successfully defending employees, protecting them from unfairness or mobilizing job resources, which positively affect employee’s wellbeing [22]. Ethical leaders are humanitarian, honest and trustworthy. They encourage employees to express their worries and make just decisions on issues of concern and importance to employees [23]. In doing so, ethical leaders are fair and honest and provide employees with a safety net to fall back on when they experience low levels of wellbeing at work. Thus, employees receive help, care, and emotional support from their leader. Accordingly, Zou et al., (2020) show the effect of spiritual leadership on the Chinese nurses subjective well-being [24]. Teimouri et al., (2018) also confirmed the effect of ethical leadership on psychological wellbeing of employees [25]. Sarwar et al., (2020) also show the direct positive relation between ethical leadership and employee well-being [26]. Thus, according to the previous research, the following hypothesis is made:

Hypothesis 1 – The leader’s ethical leadership has a significant effect on the subjective wellbeing of nurses.

Job satisfaction is a multidimensional concept associated with a variety of psychological and social factors [27]. Moreover, earlier studies found a significant relationship between ethical leadership style and various organizational achievements, including job satisfaction [27, 28]. Tu et al., (2017) confirmed the effect of supervisors’ ethical leadership on employee job satisfaction [14]. According to Robbins and Coulter (2007), job satisfaction is an employee’s general attitude to his/her job [29]. According to Qing et al., (2018), ethical leadership can predict job satisfaction positively in public sector organizations [11].
Moreover, Freire and Bettencourt (2020) showed that ethical leadership had a positive effect on nurses’ job satisfaction. Ruiz-Palomino et al. (2011) stated that the significant relationship between ethical leadership and job satisfaction was due to the important role that leaders played in modeling organizational culture and climate [30]. Kim and Brymer (2011) also consider ethical behaviors of leaders to be involved in an employee’s enhanced job satisfaction and contentment with the current working condition and amount of payment [8]. Thus, according to the previous research, the following hypothesis is made:

Hypothesis 2 – The Leader’s ethical leadership has a significant effect on the job satisfaction of nurses.

The mediation effect of job satisfaction on the relationship between ethical leadership and subjective wellbeing has not been sufficiently addressed in literature. Among rare existent studies, Ahanchian et al., (2018) shows the positive effect of ethical leadership on life well-being of nurses mediated by job satisfaction. However, they did not consider the subjective wellbeing of employees [31]. Mehari (2015) also shows that job satisfaction indirectly mediates the effect of transformational leadership and employee well-being [32]. Indeed, it is the leader’s ethical behavior that either directly or indirectly influences followers’ subjective well-being. Hence, in line with these previous research findings, the following hypothesis is suggested:

Hypothesis 3 – Job satisfaction has a significant effect on the subjective wellbeing of nurses.

Hypothesis 4 – Job satisfaction significantly mediates the effect of ethical leadership on the subjective wellbeing of nurses.

Given the above three main hypotheses, the research conceptual model is presented as follows:

Insert Figure 1

Methods

The present applied research was conducted as a descriptive-correlational survey in which the data were analyzed through covariance matrix using structural equation modeling (SEM) technique. The nurses of private hospitals in Mashhad (i.e. Bent-ol-Hoda, Mehr, Sina and Razavi hospitals) who were a sum of 730 in number comprised the statistical population of the present study.

As the statistical population was from several hospitals, the stratified sampling method has been used. First, four hospitals of Bent-ol-Hoda, Mehr, Sina and Razavi hospitals were randomly selected from the list of Mashhad private hospitals. By considering the error level for 5% in Cochran formula, the sample size was accurately estimated at 95 percent confidence interval and significance level of 5 percent, giving a sample size of 157 persons. Then, random sampling was performed from each hospital according to the ratio of sample to community (equivalent to 0.23). However, anticipating that a certain number of the questionnaires may not return, 200 questionnaires were actually distributed among nurses. Of these
questionnaires, 166 completed questionnaires were eventually used in the analysis phase. The size of the population and the sample by strata are given in Table 1.

Given the limited number of overpopulations, the sample size was determined using Cochran formula for finite population. In this sampling procedure, first, a preliminary sample of 30 questionnaires were pretested and then, by replacing its error level for 5% in Cochran formula, the sample size was accurately estimated at 95% confidence interval and significance level of 5%, giving a sample size of 157 persons. However, anticipating that a certain number of the questionnaires may not return, 200 questionnaires were actually distributed among nurses. Of these questionnaires, 166 completed questionnaires were eventually used in the analysis phase.

Seventeen standard measures in Yang (2014) [33] were used to measure the variables. In order to apply these measures to the Iranian society, they were adapted using translation – back – translation method. The face and content validity of the final questionnaire was verified by five management professors and five of the nurses working in private hospitals of Mashhad. We conducted Job satisfaction, ethical leadership, and subjective wellbeing which were measured with 4, 9, and 4 items, respectively. In addition, using the content-face validity method, the construct validity of items was examined and confirmed by experts, management professors and nurses. In testing construct validity, a confirmatory factor analysis was used. The reliability (internal consistency) was tested using Cronbach's alpha. The calculated alpha of the questionnaire was .81 which confirms its adequate reliability. In Table 1, calculated Cronbach's alphas are presented per variable, and in Table 2, the results of the Pearson correlation test are presented. It should be noted that all the items were rated on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Data analysis tests, including Pearson correlation coefficient was used to estimate zero order correlation coefficients. SEM was run along with the tests of goodness of fit in structural equations in Smart PLS3.

Results

Descriptive statistics

Respondents' demographic information was analyzed in terms of 4 variables: gender, age, education and years of service (work experience). According to the descriptive analysis, 68.1% of respondents were women and 31.9% were men; 32.5% aged between 20 and 30, 38.6% between 31 and 40, 22.9% between 41 and 50, 4.8% between 51 and 60, and 1.2% above 61; 15.7% were high school graduates, 18.7% junior college graduates, 42.8% university undergraduates, 12.7% university graduates, and 10.2% Ph.D. graduates; 28.9% had less than 5 years of working experience, 21.7% between 5 and 10 years, 21.1% between 10 and 15 years, 12% between 15 and 20 years, 12.7% between 20 and 25 years, and 3.6% worked more than 25 years.

Table 2 presents Cronbach's alpha, mean response and the respective standard deviation of each variable. Note that the Cronbach's alpha for job satisfaction was initially .42, but after the exclusion of
one item it rose to .82.

As it can be observed in the above table, the mean responses for all variables are in an appropriate mean, among which the highest amount belongs to ethical leadership.

As the presence of a pairwise linear correlation between variables is a necessary assumption in applying the latent variables method in structural equation modeling (SEM), first, for each pair of variables, Pearson correlation test was run and the result is presented in Table 3.

**Note:** [one-tailed] correlation at significance level of $p < 0.01$; * correlation at significance level of $p < 0.05$

As Table 2 shows, the strongest correlation is that of job satisfaction and SWB ($r = 0.560$), and the smallest correlation exists between SWB and ethical leadership ($r = 0.103$). In addition, all the estimated paired correlation coefficients are positive and significant.

**Validity and reliability of measurement and structural model**

The research model was analyzed by Smart PLS 3 employing structural equation modeling (SEM). The validity and reliability of the constructs was estimated using factor loadings, Cronbach's Alpha, composite Reliability average variance extracted (AVE) shown in Table 4.

As shown in Table 4, all factor loadings were more than 0.5, shown appropriate reliability. Cronbach's $\alpha$ incidents were above 0.7 value showing satisfactory reliability. Moreover, the value of composite reliability and AVE were more than 0.7 and 0.5 respectively, showing satisfactory reliability [34].

To test the hypotheses, the partial least squares structural equation modeling (PLS-SEM) by Smart PLS 3 was employed. To test the fitness of structural model, R2 and Q2 measures were shown in Table 5.

As shown in Table 5, The first criterion for examining the structural model is the coefficient of determination R2 related to the endogenous (dependent) latent variables in the model and shows the effect of an exogenous variable on an endogenous variable. The strength of this effect interpreted with three values of 0.19, 0.33 and 0.67 as weak, medium and strong values [34]. Accordingly, the result shows that the model can predict 0.213 percent of job satisfaction changes, measured as a mediate effect. Moreover, 49 percent of subjective well-being changes predicted by the model, showed strong effects of exogenous variables of the model on subjective well-being. Q2 value determines the strength of the model in predicting dependent variables. Hair et al., (2014) considered three values of 0.02, 0.15 and 0.35 as low, medium and strong predictive strength [34]. As shown in Table 4, the value of Q2 for all dependent variables were moderate.

**Test of hypotheses**

To test the hypotheses, PLS-SEM by Smart PLS 3 was employed. Figure 2 shows the SME model in T-value mood:
According to Figure 2, the relationship between variables are significant when the T-value was more than 1.96. As shown in Figure 2, all hypotheses of the research were accepted. The result of hypothesis tests is shown in Table 6.

According to Table 4, all hypothesis was supported. Thus, the impact of ethical leadership ($\beta = 0.155$, T-value= 2.420) and job satisfaction ($\beta = 0.619$ T-value= 11.338) on subjective wellbeing are significant. Moreover, the effect of ethical leadership on job satisfaction is supported ($\beta = 0.462$ T-value= 7.445).

Testing mediation effects

To measure mediation effect of job satisfaction in the relationship between ethical leadership and subjective wellbeing, the indirect effect shown in Table 7.

As shown in Table 4, the indirect effect of ethical leadership on subjective wellbeing through job satisfaction is confirmed ($\beta = 0.286$, T-value= 7.160), shown the mediation effect of job satisfaction. The result also shows that the indirect effect of ethical leadership on subjective wellbeing through job satisfaction is more than the direct effect of ethical leadership on subjective wellbeing ($\beta = 0.155$, T-value= 2.420). Accordingly, the total effect (direct effect* indirect effect) of ethical leadership on subjective wellbeing is 0.443.

Discussion

The aim of this study was to investigate the relationship between moral leadership and subjective wellbeing with the mediating role of job satisfaction among nurses in four private hospitals in Mashhad. This study is based on social identity theory which states that nurses' behavior is influenced by the behavior of their managers and leaders, leading nurses to be identified in the workplace. The results of data analysis showed that there is a significant relationship between research variables. In general, this study had two main conclusions: The first one reveals that ethical leadership directly and indirectly affects nurses' happiness. Therefore, we can conclude that moral leadership affects not only the work of an individual but also the subjective wellbeing of nurses, which is in line with Yang [33], Teimouri et al., [25] and Sarwar et al., [26]. Zou et al., (2020) also show the effect of spiritual leadership on the nurse's subjective well-being [24]. In this regard, the authors also conducted interviews with the nurses under study, which they also confirmed and stated that the ethical leadership style in the hospital can greatly affect their mental happiness and feeling of happiness. The second conclusion indicates that ethical leadership affects nurses' job satisfaction, which is in line with the study of Ngabonzima et al., [35], Ganji et al., [36] and Tu et al., [16]. Moreover, the results also are in line with Freire and Bettencourt [13] study, shown the positive effect of ethical leadership on nurses' job satisfaction. In this regard, a number of additional interviews were conducted with some nurses who also emphasized that ethical leadership style has an impact on their job satisfaction. The results also confirmed the mediation effect of job satisfaction.
satisfaction on subjective wellbeing, which is in consistent with Ahanchian et al [31] and Mehari [32] studies.

These results, seen in a broader context, point to the increasing importance of ethically-oriented leadership in the target organization and healthcare institutions. Appreciating admirable human values, and being supportive and inspiring to nurses and other employees in the healthcare sector would create a feeling of usefulness and efficacy, pave the way for effective task performance and satisfy psychological needs. The ethically oriented approach in leadership has many benefits for organizations, which are more obvious and noticeable in the health management system and the nursing staff due to the dominance of an intimate and strongly emotional atmosphere. The particular working state and atmosphere of hospitals require such closeness and company among nurses, staff members, physicians, and patients. Naturally, through this closeness, many ethical issues are highlighted. The prevalence of ethical leadership in hospitals makes managers of sections and units further committed to ethical principles and somehow set an example for subordinates. We may then expect practice of ethical behaviors from nurses and staff members. Leadership, by definition, means influence and persuasion of others as distinguished from management by its emphasis on voluntary compliance of subordinates. Indeed, leadership behavior, in itself, is effective, supportive, stimulating and significant and when seasoned by the consideration of ethics and as an ethical model, it takes a more pleasing color which significantly contributes to the establishment of ethical rules in the organization. Our results, in general, support the promotion of ethical leadership in private hospitals through formal planning and top management initiatives both for the good of employee's working conditions and the quality of the services provided.

**Conclusion**

In this research, the correlation of ethical leadership and job satisfaction, and also its (their) relation with subjective wellbeing with and without the nursing staff's job satisfaction as the mediator was examined in Mashhad. The results indicated significant effect of ethical leadership on job satisfaction and subjective wellbeing. Accordingly, results show that job satisfaction mediates the effect of ethical leadership on subjective wellbeing among nurses. Accordingly, because the ethical leader of the hospital increases the feeling of satisfaction in nurses by adhering to ethical principles, fair and equitable resolution of issues, listening to the conversations and concerns of nurses, and sympathy and solving their problems, then nurse job satisfaction and subjective well-being would be increased. Hospitals directors and managers should integrate ethical leadership into the core values and visions of the firm, and the basic norms of the business as well as establishing, endorsing and communicating the value and meaning of ethical leadership throughout the firm, directors and top managements themselves should be actively engaged in meaning-making and practices of good ethical leadership and should also show a good ethical management skill in general.

**Declarations**

**Availability of data and materials**
For having this data, please contact AK at kafashpor@um.ac.ir

**Abbreviations**

Not applicable

**Declarations**

Not applicable

**Ethics approval and consent to participate**

This work is supported by grant NO.52087 from Vice president for Research & Technology. The ethical protocols were approved by the Ethics Committee of Ferdowsi University of Mashhad. We reviewed all 166 completed questionnaires admitted to Ferdowsi university of Mashhad between 13/3/2018 and 20/8/2018 after approval of ethical committee of Human Research (NO. 52087), the study was carried out based on data collection from Mashhad private hospitals. **Consent for publication**

The License agreement is supplementary to No. 10

**Competing interests**

The authors declare that they have no competing interests.

**Funding**

Not applicable

**Authors’ contributions**

SS carried out data gathering, statistical analyses of the data and interview with nurses. AK designed the study and performed the histological examination of the Ethical Leadership, and was a major contributor in writing the manuscript. All authors read and approved the final manuscript.

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Tables

Table 1: Population and sample size
| Hospital              | No. Nurses | Sample size |
|-----------------------|------------|-------------|
| Bent-ol-Hoda Hospital | 221        | 166/221*221=50.25 |
| Mehr Hospital         | 148        | 34          |
| Sina Hospital         | 107        | 24          |
| Razavi hospitals      | 254        | 58          |
| **Sum**               | **730**    | **166**     |

Table 2 – Mean test and Cronbach Alpha

| Variable           | Mean | St. Dev. | Sig  | Status     |
|--------------------|------|----------|------|------------|
| (1) Ethical leadership | 3.97 | .52      | 0.000 | Appropriate |
| (2) Job satisfaction   | 3.33 | .69      | 0.000 | Appropriate |
| (3) SWB              | 3.25 | .68      | 0.000 | Appropriate |

Table 3 – The results of Pearson correlation test

| Variable           | (1) | (2) | (3) |
|--------------------|-----|-----|-----|
| (1) Ethical leadership |   - | .184* | .103 |
| (2) Job satisfaction   | .184* | -   | .560** |
| (3) SWB              | .103 | .560** | -   |

Table 4: Validity and Reliability test
| Construct               | Items | Factor loadings | Cronbach's Alpha | Composite Reliability | Average Variance Extracted (AVE) |
|-------------------------|-------|----------------|------------------|-----------------------|----------------------------------|
| Ethical Leadership      | 1     | 0.718          |                   |                       | 0/884 0/907 0/523               |
|                         | 2     | 0.624          |                   |                       |                                  |
|                         | 3     | 0.807          |                   |                       |                                  |
|                         | 4     | 0.799          |                   |                       |                                  |
|                         | 5     | 0.816          |                   |                       |                                  |
|                         | 6     | 0.722          |                   |                       |                                  |
|                         | 7     | 0.670          |                   |                       |                                  |
|                         | 8     | 0.589          |                   |                       |                                  |
|                         | 9     | 0.718          |                   |                       |                                  |
| Job Satisfaction        | 10    | 0.848          | 0/768             | 0/865                 | 0/683                            |
|                         | 11    | 0.891          |                   |                       |                                  |
|                         | 12    | 0.733          |                   |                       |                                  |
| Subjective Wellbeing    | 13    | 0.734          | 0/790             | 0/856                 | 0/543                            |
|                         | 14    | 0.731          |                   |                       |                                  |
|                         | 15    | 0.763          |                   |                       |                                  |
|                         | 16    | 0.764          |                   |                       |                                  |
|                         | 17    | 0.689          |                   |                       |                                  |

Table 5: Goodness of fit of structural model

|                        | SSO       | SSE       | Q² (=1-SSE/SSO) | R Square |
|------------------------|-----------|-----------|-----------------|----------|
| Ethical Leadership     | 1,494/000 | 1,494/000 |                 |          |
| Job Satisfaction       | 498/000   | 432/517   | 0/131           | 0/213    |
| Subjective Wellbeing   | 830/000   | 626/835   | 0/245           | 0/495    |

Table 6 – Summary of hypotheses testing results
| Hypothesis                                      | Standard Path Coefficients | T-value | Results  |
|------------------------------------------------|---------------------------|---------|----------|
| Ethical Leadership -> Job Satisfaction         | 0.462                     | 7.445   | Supported|
| Job Satisfaction -> Subjective Wellbeing       | 0.619                     | 11.338  | Supported|
| Ethical Leadership -> Subjective wellbeing     | 0.155                     | 2.420   | Supported|

**Table 7 – Summary of hypotheses testing results**

| Hypothesis                                      | Indirect Effect | Total Effect |
|------------------------------------------------|-----------------|--------------|
|                                               | Standard path  | T Value      | Standard path | T Value |
|                                               | coefficients    |              | coefficients  |         |
| Ethical Leadership -> Job Satisfaction ->     | 0.286           | 7.160        | 0.443         | 6.705   |
| Subjective Wellbeing                          |                 |              |               |         |