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The Relationship between Leadership Style, Organizational Culture, and Job Satisfaction in the U.S. Healthcare Industry

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Abstract

The purpose of this quantitative, correlational study, based on the theoretical framework of transformational leadership, was to examine the relationships between leadership style, organizational culture, and job satisfaction in the U.S. healthcare industry. The study addressed a problem faced by U.S. healthcare leaders, who are currently unaware as to how transformational leadership and organizational culture can impact job satisfaction in an industry with high burnout and low satisfaction levels. The following research questions for exploration are: (1) Is there a statistically significant relationship between transformational leadership and job satisfaction in the U.S. healthcare industry? (2) Is there a statistically significant relationship between organizational culture and job satisfaction in the U.S. healthcare industry? (3) Is the relationship between transformational leadership and job satisfaction in the U.S. healthcare industry mediated by organizational culture? Data to answer the research questions is from a collection through random sampling processes that resulted in a sample of 111 American healthcare employees and analyzed with Stata software. The main finding of the study was that an apparent effect of transformational leadership on job satisfaction disappeared when organizational culture variables are considered. The results suggest that healthcare organizations should attempt to move away from externally focused cultures in order to increase job satisfaction. Such a move could improve social outcomes by improving the quality of work for millions of stressed American healthcare employees.

Keywords: Transformational leadership; Leadership styles; Organizational culture; Job satisfaction; Organizational commitment; Healthcare professionals.

1. INTRODUCTION

1.1. Background

Job satisfaction is rated low in the United States and throughout the world. According to a recent survey conducted by the Gallup Organization, only 13% of employees consider themselves to be highly satisfied (Crabtree, 2013). In the field of healthcare, job satisfaction is particularly low. The factors for the low satisfaction are high levels of burnout, long work hours, workplace bullying, demanding jobs, insufficient managerial support, time-consuming regulatory obligations, and many other factors (Adriaenssens, De Gucht, & Maes, 2015; Allen, Holland, & Reynolds, 2015; Cao, Chen, Tian, & Diao, 2016; Jesse, Abouljoud, Hogan, & Eshelman, 2015; Klopper, Coetzee, Pretorius, & Bester, 2012). In this climate, it is incumbent upon healthcare leaders to find novel and practical means of raising the satisfaction levels of their employees. One proven method of doing so is applying transformational leadership (Mesu, Sanders, & van Riemsdijk, 2015; Top, Akdere, & Tarcan, 2015; Welty Peachey, Burton, & Wells, 2014; Yahaya & Ebrahim, 2016; Yucel, McMillan, & Richard, 2014). A complementary method to transformational leadership application is that of altering organizational culture (Choi, Jang, Park, & Lee, 2014; Lok & Crawford, 1999; McKinnon, Harrison, Chow, & Wu, 2003; Silverthorne, 2004). However, little is known about the interactions between transformational leadership, organizational culture, and job satisfaction in the healthcare industry, posing a challenge for healthcare leaders.

1.2. Purpose of the Study

The purpose of this quantitative, correlational study was to measure the relationships between leadership style, organizational culture, and job satisfaction among a representative cross section of U.S. healthcare professionals. The purpose of this study was to find not only a mere statistical correlation (obtainable through a Pearson or Spearman correlation analysis) also a causal relationship through a regression model (ordinary least squares regression). The contribution of the study was to identify the specific contributions of transformational leadership, organizational culture, and culture-mediated transformational leadership to job satisfaction in U.S. healthcare settings.

1.3. Problem Statement

Fewer than one in five healthcare employees are satisfied in the workplace (Allen *et al.,* 2015). Thus, the general business problem addressed in the study is low satisfaction, and the specific business problem is low satisfaction in healthcare. Both transformational leadership and organizational culture change have been proposed as viable solutions to the problem of dwindling job satisfaction. In particular, the contribution of transformational leadership to job satisfaction and related constructs is well studied (Mesu *et al.,* 2015; Top *et al.,* 2015; Welty Peachey *et al.,* 2014; Yahaya and Ebrahim, 2016; Yucel *et al.,* 2014). Similarly, the relationships between organizational culture and job satisfaction have also been explored (Choi *et al.,* 2014; Lok and Crawford, 1999; McKinnon *et al.,* 2003; Silverthorne, 2004). However, there does not appear to be studies on transformational leadership, organizational culture, and the leadership-culture nexus in the healthcare industry. The current study was designed to address this gap in the literature and help American healthcare leaders understand how leadership and organizational culture can impact the satisfaction levels of their increasingly dissatisfied employees (Adriaenssens *et al.,* 2015; Allen *et al.,* 2015; Cao *et al.,* 2016; Jesse *et al.,* 2015; Klopper *et al.,* 2012).

1.4. Research Objectives

The objectives of the research study were to determine the extent to which (a) transformational leadership and job satisfaction are related, (b) organizational culture and job satisfaction are related, and (c) organizational culture mediates the relationship between transformational leadership and job satisfaction. These objectives were achieved through the application of a mediated ordinary least squares (OLS) regression approach.

1.5. Research Questions

In this study, the goal was to provide information to organizational leaders within the U.S healthcare industry regarding the effects organizational culture and the promotion of transformation leadership have on job satisfaction. The process of achieving this objective included seeking answers to the following questions:

RQ1: Is there a statistically significant relationship between the independent variable of transformational leadership and the dependent variable of job satisfaction in the U.S. healthcare industry?
RQ2: Is there a statistically significant relationship between the independent variable of organizational culture and the dependent variable of job satisfaction in the U.S. healthcare industry?
RQ3: Is the relationship between the independent variable of transformational leadership and the dependent variable of job satisfaction in the U.S. healthcare industry mediated by organizational culture?

1.6. Hypotheses

The process of answering these research questions involved testing the following null and alternative hypotheses:

H10: There is not a statistically significant relationship between transformational leadership and job satisfaction in the U.S. healthcare industry.
H1A: There is a statistically significant relationship between transformational leadership and job satisfaction in the U.S. healthcare industry.
H20: There is not a statistically significant relationship between organizational culture and job satisfaction in the U.S. healthcare industry.
H2A: There is a statistically significant relationship between organizational culture and job satisfaction in the U.S. healthcare industry.

H30: The relationship between transformational leadership and job satisfaction in the U.S. healthcare industry is not mediated by organizational culture.
H3A: The relationship between transformational leadership and job satisfaction in the U.S. healthcare industry is mediated by organizational culture.

1.7. Limitations of the Research

The main limitation of the study was that employees were asked to comment not only on their own job satisfaction and on the organizational culture in which they worked and on the transformational leadership capacities of their immediate bosses. It is possible that employees are not reliable informants of either organizational culture or the leadership qualities of their bosses. It is also possible that different employees come into contact with different aspects of organizational culture and experience volatile relationships with bosses, in which case employee-contributed information about organizational culture and the transformational leadership qualities of bosses might not be reliable or valid.

Another limitation of the study was the limited number of control variables. Only race, gender, and age were factored in as covariates. However, burnout, resilience, and several other psychological states are likely to play some role in the healthcare-employee assessments of job satisfaction. The possible roles played by variables such as burnout and resilience can be examined by future scholars.

The questionnaires on transformational leadership and job satisfaction utilized in this study are attempts to measure enormously complex constructs. A delination in the research could be verification of construct validity from the chosen instrument, in which case the results from this research study could reflect deficiencies in the instruments rather than reflect actual qualities and perceptions related to transformational leadership, organizational culture, and job satisfaction.

2. THEORETICAL FOUNDATION AND LITERATURE REVIEW

The management theory utilized in this study is the transformational leadership theory of Bass and Avolio (1990). Transformational leadership theory addresses how to improve worker satisfaction and engagement. Therefore, transformational leadership theory is an appropriate framework for a study on how to improve satisfaction through leadership type. This literature review includes an analysis and synthesis of current and previous literature surrounding the concepts of organizational culture, leadership styles, transformational leadership, and job satisfaction among U.S. healthcare professionals.

2.1. Organizational Culture

Organizational culture has been defined in many ways, with prior methods of classification distinguishing between organizational cultures that were flat and organizational cultures that were hierarchical (Ashkanasy, Vilderom, & Peterson, 2011). The competing values framework (Quinn & Rohrbaugh, 1983) of organizational culture ranks organizations as belonging to one of four quadrants. The quadrants are: (a) external focus and control-oriented structure, (b) external focus and flexible structure, (c) internal focus and control-oriented structure, and (d) internal focus and flexible structure. Given evidence from organizational psychology (Herzberg, 1965; Maslow, 1965) that workers prefer flexibility to control, contentions about how organizational cultures are flexible, can be correlated with the likeliness of higher levels of job satisfaction among employees.

Schein (2004) describes how organizational culture and leadership work together to create shared beliefs, assumptions, and shared values that shape organizational behaviors. Culture influences how employees think, solve problems, take risks, and manage change. These beliefs and values are passed down to new employees as a guide to influence organizational work processes and social interactions (Schein, 2004). A strong culture emerges when leaders and employees agree with the core values, behaviors, and beliefs of the organization.

2.2. Leadership Styles

There are numerous leadership styles, and there are also numerous ways of measuring the different leadership styles that exist (Abdelgawad, Zahra, Svejenova, & Sapienza, 2013; Avolio, Waldman, & Einstein, 1988; Bass & Avolio, 1990; Breevaart *et al.,* 2014; Chen & Silverthorne, 2005; Clinebell, 2014; Daft, 2009; Kouzes & Posner, 2006). One increasingly common means of classifying leadership styles is through the

Multifactor Leadership Questionnaire (MLQ) (Bass and Avolio, 1990), which recognized three main kinds of leadership: (a) transformational leadership, (b) transactional leadership, and (c) laissez-faire (or passive) leadership. Considering the styles of leadership, the transformational leadership style has been widely described (Mesu *et al.,* 2015; Top *et al.,* 2015; Welty Peachey *et al.,* 2014; Yahaya & Ebrahim, 2016; Yucel *et al.,* 2014) as the most effective form of leadership in relationship to job satisfaction and other outcomes.

Transformational leadership has being defined as follows:

> As its name implies, transformational leadership is a process that changes and transforms people. It is concerned with emotions, values, ethics, standards, and long-term goals. It includes assessing followers' motives, satisfying their needs, and treating them as full human beings. Transformational leadership involves an exceptional form of influence that moves followers to accomplish more than what is usually expected of them. (Northouse, 2010, p. 171).

Essentially, transactional leaders use bargaining power to manage employees and achieve organizational goals. This leadership style motivates employees with contingent rewards, raises, promotions, and perks that increase job satisfaction. However, transformational leaders seek to change and develop employees. These leaders are naturally charismatic and committed to innovation, social responsibility, and motivating and engaging their followers. They motivate employees and manage performance with vision, and according to the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1990), these leaders use 1) idealized influence, 2) intellectual stimulation, 3) inspirational motivation, and 4) individualized consideration.

2.3. New Approaches to Leadership

There is a consensus in the recent (Mesu *et al.,* 2015; Top *et al.,* 2015; Welty Peachey *et al.,* 2014; Yahaya & Ebrahim, 2016; Yucel *et al.,* 2014) leadership literature that the best approach to leadership is transformational in nature. New paradigms of leadership emphasize the need to beyond coordinating existing resources, both human and physical, and to find a way of eliciting the generation of new, extraordinary resources among followers (Abdelgawad *et al.,* 2013; Avolio *et al.,* 1988; Bass & Avolio, 1990; Breevaart *et al.,* 2014; Chen & Silverthorne, 2005; Clinebell, 2014; Daft, 2009; Kouzes & Posner, 2006). Transformational leadership can be considered an example of this new approach to leadership. Examining transformational leadership style and its effect on job satisfaction in the healthcare industry will provide a better understanding of the healthcare-industry employee shortage and allow for the development of potential strategies to mitigate high turnover rates in the healthcare industry.

Giltinane (2008) suggests that because healthcare organizations face constant changes, a combination of transformational leadership with situational leadership can be supported. Grimm (2010) model of situational leadership is based on a leader's approaches to supporting, directing and mentoring followers.

2.4. Organizational Commitment/Job Satisfaction

The constructs of organizational commitment and job satisfaction are rooted in older theories (Herzberg, 1965; Maslow, 1965) of workplace motivation. Organizational commitment is considered to be the behavioral reflection of the cognitive and affective dimensions of job satisfaction (Breevaart *et al.,* 2014; Fernet, Trépanier, Austin, Gagné, & Forest, 2015; Schmitt, Den Hartog, & Belschak, 2016). Transformational leadership attempts to build job engagement through appealing directly to followers' senses of meaning, engagement, and interest (Mesu *et al.,* 2015; Top *et al.,* 2015; Welty Peachey *et al.,* 2014; Yahaya & Ebrahim, 2016; Yucel *et al.,* 2014). Thus, transformational leadership has been found to correlate positively with the constructs of organizational commitment and job satisfaction.

Transformational leadership results in committed employees who will perform above their job requirements and exhibit citizenship behaviors for the good of the company and to achieve organizational goals (Purvanova, Bono, & Dzieweczynski, 2006).

Thamrin (2012) cites Allen and John (1990) that organizational commitment consists of three components: 1) affective, where employees desire to identify with the organization because they share the same values, 2) continuance, where employees do not want to lose the benefits they receive from the organization, and 3) normative, where employees have the strong desire to not leave the organization. Another study found that there are strong ties between transformational leadership, jobs satisfaction, motivation, organizational commitment, and performance (Tharmin, 2012; Avolio, Zhu, Koh, & Bhatia, 2004).

3. METHODOLOGY

The research approach used in this study was a quantitative method with a correlational design. Correlational designs have been described as follows:

> The variables included in the correlational research are isolated and measured by the investigator, but they are characteristics that occur naturally in the subjects…a correlation study consists of establishing a relationship between variations in the *X* variable to variations in the *Y* variable. (Keppel, Saufley, & Tokunaga, 1992, p. 460).

In this study, the variables of job satisfaction and employee perceptions of both transformational leadership and organizational culture were naturally occurring variables. Therefore, only a correlational research design could be applied in the study. The individual elements of the study's methodology have been discussed below.

3.1. Population and Sampling

The population for this study consisted of the employees of U.S. healthcare institutions, defined primarily as hospitals but also including clinical and medical support settings of various kinds. A simple random sampling approach was utilized to send study recruitment messages to the human resources (HR) heads of over 17 medical sites in the United States. HR heads were requested to disseminate a web link to the SurveyMonkey site where data for the study were collected anonymously and privately.

An a priori sample size calculation was carried out for this study. The calculation method by Cohen's recommendations (Cohen, 2013) and the use of G*Power 3.1.5 (Faul, Erdfelder, Buchner, & Lang, 2009) software. The chosen method was a two-tailed OLS regression with an effect size of 0.15, an Alpha of 0.10, a Power of 0.95, and five predictors (transformational leadership, organizational culture, race, gender, and age). Based on these inputs, a minimum sample size of 59 was recommended for the study. The final collected sample consisted of 111 individuals.

3.2. Instruments, Reliability, and Validity

In this study, the construct of transformational leadership was measured by the transformational leadership subscale of the MLQ (Bass and Avolio, 1990). There are 16 questions on this subscale, which, with the use of a seven-point Likert scale, yields a range of 16-112, with higher scores representing higher levels of transformational leadership. The Cronbach's Alpha of the transformational leadership subscale is over scale, and the content validity of this scale was established through Bass and Avolio's use of confirmatory factor analysis to ensure that the items on the transformational leadership subscale were weighted on components other than the items on the transactional and laissez-faire subscales.

The variable of job satisfaction was measured through the Work-Related Basic Need Satisfaction Scale (WRBNS) (Broeck, Vansteenkiste, Witte, Soenens, & Lens, 2010). WRBNS actually contains separate subscales for (a) work satisfaction and (b) job resources. However, for the purposes of this study, all 11 WRBNS items were collated into an index measure of job satisfaction. With a seven-point Likert scale, the range of WRNBS is from 11 to 77, with higher scores representing higher measures of job satisfaction. The WRNBS has a Cronbach's Alpha over 0.8. Confirmatory factor analysis was used to measure and distinguish between its distinct constructs of job resources and work satisfaction.

Finally, Quinn and Rohrbaugh's (1983) competing values framework was used to ask participants to rate their organizations as belonging to one of the four quadrants recognized in this framework: (a) external focus and control-oriented structure, (b) external focus and flexible structure, (c) internal focus and control-oriented structure, and (d) internal focus and flexible structure. Quinn and Rohrbaugh's (1983, p. 367) chart was used in order to assist participants in situating their company in the matrix of organizational culture.

Permission to use each of the instruments in the study was sought and obtained from the respective authors of the instruments.

3.3. Data Collection

All data were collected anonymously and privately through SurveyMonkey. Participants were asked to provide their race, gender, age, and job-satisfaction levels (as measured by the items on WRBNS). Subsequently,

participants were asked to evaluate their immediate bosses on the transformational leadership subscale of the MLQ.

3.4. Data Analysis

OLS regression was utilized to answer each of the research questions of the study. For each regression, measures of significance, effect size, coefficient values, and diagnostics were reported. Data analysis was carried out in Stata, version 14.0.

4. RESULTS

The purpose of this quantitative, correlational study was to measure the relationships between leadership style, organizational culture, and job satisfaction among a representative cross section of U.S. healthcare professionals. This purpose was achieved through mediated OLS regression. Three research questions were asked: (1) Is there a statistically significant relationship between transformational leadership and job satisfaction in the U.S. healthcare industry? (2) Is there a statistically significant relationship between organizational culture and job satisfaction in the U.S. healthcare industry? (3) Is the relationship between transformational leadership and job satisfaction in the U.S. healthcare industry mediated by organizational culture?

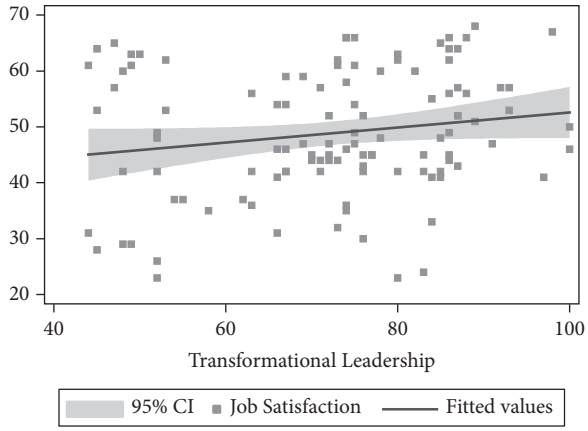
The first research question was answered by regressing transformational leadership, employee gender (treated as a dummy variable, with 0 = male, 1 = female), employee race (treated as a dummy variable with 0 = white, 1 = nonwhite), and employee age on the dependent variable of job satisfaction.

The regression for RQ1 was significant, F (4, 106) = 1.07. The effect size of the regression was 0.0389, meaning that 3.89% of the variation in job satisfaction was accounted for by variation in transformational leadership, employee age, employee gender, and employee race. However, only transformational relationship was a statistically significant predictor (Beta = 0.22, p = 0.076, t = 1.79, SE = 0.122). There was no statistically significant effect of gender (Beta = −0.53, p = .849, t = −0.19, SE = 2.78), race (Beta = −1.2, p = 0.664, t = −0.44, SE = 2.77), or age (Beta = −0.12, p = 0.405, t = −0.84, SE = 0.15). The constant was 67.30. Based on these findings, the following OLS regression was fit for the effect of transformational leadership on job satisfaction:

$$\text{Job satisfaction} = (\text{Transformational leadership} * 0.22) + 67.30$$

Thus, for every one-point increase in transformational leadership, job satisfaction rose by 0.22. However, as measured by the coefficient of determination, the effect of transformational leadership on job satisfaction was fairly small. To determine whether the OLS regression equation for RQ1 was reliable, a Breusch-Pagan / Cook-Weisberg test for heteroscedasticity was performed. The results indicated that the regression for RQ1 met the assumption of heteroscedasticity, $\chi^2(1) = 0.75$, $p = 0.388$. Figure 1 below depicts the relationship between job satisfaction and transformational leadership, with both the OLS line of best fit and the 95% confidence interval imposed. Figure 1 provides visual evidence that there were many data points that fell

Figure 1. Scatterplot, RQ1.



outside (both above and below) the 95% confidence interval, which accounts for the relatively small effect size obtained in RQ1.

The second research question of the study was as follows: Is there a statistically significant relationship between organizational culture and job satisfaction in the U.S. healthcare industry? The second research question was answered by regressing organizational culture (treated as four separate dummy variables for the four quadrants of organizational culture), employee gender, employee race, and employee age on the dependent variable of job satisfaction. In this regression, a dummy coding system (i.e., dichotomous coding) was utilized in order to distinguish between the impacts of the four recognized organizational culture types: (a) external focus and control-oriented structure (dubbed OC1), (b) external focus and flexible structure (dubbed OC2), (c) internal focus and control-oriented structure (dubbed OC3), and (d) internal focus and flexible structure (dubbed OC4). Because of the greater number of variables in the OLS for RQ2, a table was employed to display the coefficient results. The coefficient results are presented in Table 1 below.

The regression for RQ2 was significant, $F(7, 103) = 2.63$. The effect size of the regression was 0.1519, meaning that 15.19% of the variation in job satisfaction was accounted for by variation in organizational culture, employee age, employee gender, and employee race. However, only OC1 (external focus and control-oriented structure) and OC2 (external focus and flexible structure) were statistically significant predictors. Because OC1 and OC2 were mutually exclusive dummy variables, they required two equations, as follows:

$$\text{Job satisfaction} = (\text{OC1} * -17.42) + 91.35$$
$$\text{Job satisfaction} = (\text{OC2} * -12.31) + 91.35$$

Thus, the presence of an external focus and control-oriented structure reduced overall employee job satisfaction by 17.42 points, whereas the presence of an external focus and flexible structure reduced overall employee job satisfaction by 12.31 points. External structures therefore appeared to reduce job satisfaction in comparison to internal structures. Finally, in order to determine whether the OLS regression equation for RQ2 was reliable, a Breusch-Pagan / Cook-Weisberg test for heteroscedasticity was performed. The results indicated that the regression for RQ2 met the assumption of heteroscedasticity, $\chi^2(1) = 0.10$, $p = 0.754$.

The third research question of the study was as follows: Is the relationship between transformational leadership and job satisfaction in the U.S. healthcare industry mediated by organizational culture? The third research question was answered by regressing organizational culture, transformational leadership, employee gender, employee race, and employee age on the dependent variable of job satisfaction. Because of the greater number of variables in the OLS for RQ3, a table was employed to display the coefficient results. The coefficient results are presented in Table 2 below.

Table 1. Coefficient Results, RQ2.

Variable	Coefficient	S.E.	*t*	*p*	95% confidence interval (lower bound)	95% confidence interval (higher bound)
Gender	−1.627472	2.692952	−0.6	0.547	−6.968307	3.713363
Race	−2.274995	2.66127	−0.85	0.395	−7.552997	3.003007
Age	−0.1565731	0.1428327	−1.1	0.276	−0.4398481	0.1267019
OC1	−17.42278	5.528626	−3.15	0.002	−28.38751	−6.458055
OC2	−12.30631	5.852054	−2.1	0.038	−23.91248	−0.700142
OC3	−5.547755	5.396513	−1.03	0.306	−16.25047	5.154957
OC4	−8.897602	6.026755	−1.48	0.143	−20.85025	3.055046
Constant	91.35237	8.02322	11.39	0	75.44021	107.2645

Table 2. Coefficient Results, RQ3.

Variable	Coefficient	S.E.	*t*	*p*	95% confidence interval (lower bound)	95% confidence interval (higher bound)
Transformational leadership	0.096922	0.121737	0.8	0.428	−0.14454	0.338386
Gender	−1.49355	2.70299	−0.55	0.582	−6.85491	3.867824
Race	−2.30006	2.666199	−0.86	0.39	−7.58845	2.988331
Age	−0.14944	0.143367	−1.04	0.3	−0.43381	0.134925
OC1	−16.4901	5.661009	−2.91	0.004	−27.7187	−5.26154
OC2	−11.4798	5.953687	−1.93	0.057	−23.2889	0.329299
OC3	−5.23469	5.420412	−0.97	0.336	−15.9861	5.516675
OC4	−8.32686	6.079906	−1.37	0.174	−20.3863	3.732601
Constant	85.64412	10.77065	7.95	0	64.28058	107.007

The regression for RQ3 was significant, $F(8, 102) = 2.38$. The effect size of the regression was 0.1571, meaning that 15.71% of the variation in job satisfaction was accounted for by variation in transformational leadership, organizational culture, employee age, employee gender, and employee race. However, only OC1 (external focus and control-oriented structure) and OC2 (external focus and flexible structure) were statistically significant predictors; their inclusion in RQ3 made transformational leadership, which was significant in RQ1, no longer significant. The inclusion of transformational leadership in RQ3 did, however, slightly lower the negative impact that OC1 and OC2 had on job satisfaction, as follows:

$$\text{Job Satisfaction} = (\text{OC1} * -16.49) + 85.64$$
$$\text{Job Satisfaction} = (\text{OC2} * -11.48) + 85.64$$

5. DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

The findings of the study were notable for several reasons. First, the findings of the study did not confirm previous findings (Mesu *et al.,* 2015; Top *et al.,* 2015; Welty Peachey *et al.,* 2014; Yahaya and Ebrahim, 2016; Yucel *et al.,* 2014) about the ability of transformational leadership to increase job satisfaction. Although transformational leadership appeared to increase employee satisfaction (in the analysis for RQ1), the inclusion of the moderating variables of organizational culture in RQ3 resulted in transformational leadership no longer being a significant predictor. If the findings of the study are both reliable and valid, then the main implication is that healthcare organizations seeking a means of increasing employee satisfaction ought to consider moving away from externally focused cultures. It is possible that externally focused cultures remove the emphasis from understanding and meeting the needs of internal stakeholders, although further analysis is necessary to understand the possible causal relationships between externally focused cultures and lower job satisfaction.

Future scholars should consider the relationship (or lack thereof) between the variables of transformational leadership, organizational culture, and job satisfaction in light of other psychological constructs. For example, it might be the case that there is a positive relationship between transformational leadership and job satisfaction, but only for certain kinds of employees—for example, employees who are more experienced, resilient, or hopeful. Because of the many variables that can play explanatory roles in any examination of the relationship between transformational leadership, organizational culture, and job satisfaction,

as many psychological variables as possible ought to be included in future empirical studies that attempt to build on the current study. For healthcare leaders, the main message emerging from the current study is that special effort has to be made to create an internally focused culture. While the development of transformational leadership might be useful for other purposes (such as for improving employee productivity), it is not significantly associated with job satisfaction. However, given that internally focused cultures were associated with job satisfaction, it would be appropriate for healthcare leaders to give special attention to the creation of these kinds of cultures.

References

Abdelgawad, S. G., Zahra, S. A., Svejenova, S., & Sapienza, H. J. (2013). Strategic leadership and entrepreneurial capability for game change. *Journal of Leadership & Organizational Studies*, 20(4), 394–407. doi: 10.1177/1548051813475484

Adriaenssens, J., De Gucht, V., & Maes, S. (2015). Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research. *International Journal of Nursing Studies, 52*(2), 649–661. doi: 10.1016/j.ijnurstu.2014.11.004

Allen, B. C., Holland, P., & Reynolds, R. (2015). The effect of bullying on burnout in nurses: the moderating role of psychological detachment. *Journal of Advanced Nursing, 71*(2), 381–390. doi: 10.1111/jan.12489

Allen, N. J., & John P., M. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. Journal of Occupational Psychology, 63(1), 1-18.

Ashkanasy, N. M., Vilderom, C. P., & Peterson, M. F. (2011). *The handbook of organizational culture and climate*. Thousand Oaks, CA: Sage.

Avolio, B. J., Waldman, D. A., & Einstein, W. O. (1988). Transformational leadership in a management game simulation impacting the bottom line. *Group & Organization Management, 13*(1), 59–80. doi: 10.1177/105960118801300109

Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. Journal of organizational behavior, 25(8), 951-968.

Bass, B. M., & Avolio, B. J. (1990). Developing transformational leadership. *Journal of European Industrial Training, 14*(5), 21–34. doi: 10.1108/03090599010135122

Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology, 87*(1), 138–157. doi:10.1111/joop.12041

Broeck, A., Vansteenkiste, M., Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology, 83*(4), 981–1002.

Cao, X., Chen, L., Tian, L., & Diao, Y. (2016). The effect of perceived organisational support on burnout among community health nurses in China: the mediating role of professional self-concept. *Journal of Nursing Management, 24*(1), E77–E86. doi: 10.1111/jonm.12292

Chen, J.C., & Silverthorne, C. (2005). Leadership effectiveness, leadership style and employee readiness. *Leadership & Organization Development Journal, 26*(4), 280–288. doi: 10.1108/01437730510600652

Choi, S., Jang, I., Park, S., & Lee, H. (2014). Effects of organizational culture, self-leadership and empowerment on job satisfaction and turnover intention in general hospital nurses. *Journal of Korean Academy of Nursing Administration, 20*(2), 206–214. doi: 10.11111/jkana.2014.20.2.206

Clinebell, S. (2014). Snapshots of great leadership. *Academy of Management Learning & Education, 13*(1), 139–141. doi: 10.5465/amle.2014.0017

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. New York, NY: Routledge.

Crabtree, S. (2013). Worldwide, 13% of employees are engaged at work. Retrieved from http://www.gallup.com/poll/165269/worldwide-employees-engaged-work.aspx

Daft, R. (2009). *The leadership experience*. New York, NY: Cengage.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149–1160. doi: 10.3758/brm.41.4.1149

Fernet, C., Trépanier, S. G., Austin, S., Gagné, M., & Forest, J. (2015). Transformational leadership and optimal functioning at work: On the mediating role of employees' perceived job characteristics and motivation. *Work & Stress, 29*(1), 11–31. doi:10.1080/02678373.2014.1003998

Giltinane, C. L. (2013). Leadership styles and theories. Nursing Standard (through 2013), 27(41), 35-9. Retrieved from https://search.proquest.com/docview/1368907593?accountid=458

Grimm JW (2010) Effective leadership: making the difference. Journal of Emergency Nursing. 36, 1, 74-77.
Herzberg, F. (1965). Job attitudes in the Soviet Union. *Personnel Psychology, 18*(3), 245–252. doi: 10.1111/j.1744–6570.1965.tb00283.x
Jesse, M. T., Abouljoud, M. S., Hogan, K., & Eshelman, A. (2015). Burnout in transplant nurses. *Progress in Transplantation, 25*(3), 196–202. doi: 10.7182/pit2015213
Keppel, G., Saufley, W. H., & Tokunaga, H. (1992). *Introduction to design and analysis*. New York, NY: Macmillan.
Klopper, H. C., Coetzee, S. K., Pretorius, R., & Bester, P. (2012). Practice environment, job satisfaction and burnout of critical care nurses in South Africa. *Journal of Nursing Management, 20*(5), 685–695. doi: 10.1111/j.1365-2834.2011.01350.x
Kouzes, J. M., & Posner, B. Z. (2006). *The leadership challenge*. New York, NY: John Wiley & Sons.
Lok, P., & Crawford, J. (1999). The relationship between commitment and organizational culture, subculture, leadership style and job satisfaction in organizational change and development. *Leadership & Organization Development Journal, 20*(7), 365–374. doi: 10.1108/01437739910302524
Maslow, A. H. (1965). *Toward a psychology of being*. New York, NY: Start Publishing.
McKinnon, J. L., Harrison, G. L., Chow, C. W., & Wu, A. (2003). Organizational culture: Association with commitment, job satisfaction, propensity to remain, and information sharing in Taiwan. *International Journal of Business Studies, 11*(1), 25–36. doi: 10.1108/01437730410561477
Mesu, J., Sanders, K., & van Riemsdijk, M. (2015). Transformational leadership and organisational commitment in manufacturing and service small to medium-sized enterprises The moderating effects of directive and participative leadership. *Personnel Review, 44*(6), 970–990. doi: 10.1108/PR-01-2014-0020
Northouse, P. (2010). *Leadership: theory and practice*. Thousand Oaks, CA: Sage.
Purvanova, R. K., Bono, J. E., & Dzieweczynski, J. (2006). Transformational leadership, job characteristics, and organizational citizenship performance. *Human Performance,* 19(1), 1-22. doi: 10.1207/s15327043hup1901_1
Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science, 29*(3), 363–377. doi: 10.1287/mnsc.29.3.363
Schein, E. (2004). Organizational culture and leadership (3rd ed.). San Francisco: Jossey-Bass.
Schmitt, A., Den Hartog, D. N., & Belschak, F. D. (2016). Transformational leadership and proactive work behaviour: A moderated mediation model including work engagement and job strain. *Journal of Occupational and Organizational Psychology, 89*(3), 588–610. doi:10.1111/joop.12143
Silverthorne, C. (2004). The impact of organizational culture and person-organization fit on organizational commitment and job satisfaction in Taiwan. *Leadership & Organization Development Journal, 25*(7), 592–599. doi: 10.1108/01437730410561477
Thamrin, H. M. (2012). The influence of transformational leadership and Organizational commitment on job satisfaction and employee performance. *International Journal of Innovation, Management and Technology,* 3(5), 566. doi:10.7763/IJIMT.2012.V3.299
Top, M., Akdere, M., & Tarcan, M. (2015). Examining transformational leadership, job satisfaction, organizational commitment and organizational trust in Turkish hospitals: public servants versus private sector employees. *The International Journal of Human Resource Management*, *26*(9), 1259–1282. doi:10.1080/09585192.2014.939987
Welty Peachey, J., Burton, L., & Wells, J. (2014). Examining the influence of transformational leadership, organizational commitment, job embeddedness, and job search behaviors on turnover intentions in intercollegiate athletics. *Leadership & Organization Development Journal*, *35*(8), 740–755. doi: 10.1108/LODJ-10-2012-0128
Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment: literature review. *Journal of Management Development*, *35*(2), 190–216. doi: 10.1108/JMD-01-2015-0004
Yucel, I., McMillan, A., & Richard, O. C. (2014). Does CEO transformational leadership influence top executive normative commitment? *Journal of Business Research*, *67*(6), 1170–1177. doi:10.1016/j.jbusres.2013.05.005

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