

# Transformational Leadership and Work Engagement on Turnover Intention of Employees in the MNCs in Vietnam: The Moderating Role of Job Satisfaction and Organizational Size

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## Abstract

Specifically, this research paper aims to provide a more detailed understanding of how transformational leadership can influence employee's morale and attrition intentions, using the exploration of job satisfaction and organizational size as a moderator. The survey included 652 employees from sixteen MNCs operating in Ho Chi Minh City, Vietnam. Data was analyzed using AMOS software package version 24.0. The results have shown that transformational leadership has a positive impact on work engagement and work engagement has a mitigating effect on turnover. In addition, it suggests that job commitment influences the connection between transformational leadership and the employee's desire to make a transition. This study's result will benefit the managers who wish to reduce employee turnover by leveraging on the transformational leadership style of management. In larger organizational settings, empirical evidence supports this theory. Both theories were afforded empiric support. Discussions, conceptual and administrative consequences, shortcomings, and potential guidance are also presented.

**Keywords:** Transformational leadership; Work engagement; Turnover intention; Job satisfaction; And organizational size.

## 1. Introduction

Substantial improvement has been made since the time of Aristotle in recognizing honesty and transformational leadership. A snapshot emerges of some fascinating developments in the world of transformational leadership. Second, the concept of validity has varied considerably through studies (Gardner *et al.*, 2005; Kiersch and Peters, 2017). Governance may encompass several activities, and the effect of leadership traits on the actions of employees has been an emerging field of study. This research is focused on the philosophy of transformational leadership (Rego *et al.*, 2012). Currently, when unscrupulous conduct by business management has been unveiled, it has been instructive to pay attention to the actions of executives in terms of honesty and authenticity in working partnerships rather than coercion or working for secret ends. Meaningful leadership theory describes an authentic leader as being defined by a high degree of self-awareness, healthy knowledge gathering, social accountability and internalized spiritual insight, and behaving in line with accepted feelings and emotions (Leroy *et al.*, 2015). Analysts have explored the effect of transformational leadership on a broad spectrum of job attitudes. Leadership researchers, though, have documented a scarcity of studies exploring fundamental factors that clarify how leaders affect critical structures in organizations, such as promoting creativity. Leadership researchers have indicated that further research is required to explore the impact of leadership activities at various levels, such as relating leadership characteristics to the personalities or activities of certain workers inside teams or organizations (Peus *et al.*, 2012).

Walumbwa *et al.* (2008), specifically conceptualized leadership effectiveness as a high-level framework and described it as "a pattern of leadership activity that draws on and encourages both positive psychological capabilities and a positive ethical environment" (p. 94). A change orders True Leadership Paradigm was also introduced. According to Klenke (2007) transformational leadership is ultimately expressed by self-awareness, healthy processing, internalized moral perspective and logical honesty. Self-awareness relates to the understanding of one's own abilities and shortcomings and the psychological effect on others. Controlled processing applies to leaders who question their firmly rooted views and critically analyze all pertinent details while organizing (Walumbwa *et al.*, 2008). Internalized normative understanding relates to self-regulation focused on internal moral principles and beliefs, as opposed to perceived pressure-driven conduct. Relational openness applies to leadership practices that publicly reveal one's real self, and one's real emotions, and feelings to supporters to encourage shared confidence (Giallonardo *et al.*, 2010).

Meaningful management is ultimately increasing in the manufacturing industry due to globalization (Wu *et al.*, 2017). Unlike other sectors, such as service and retail, the manufacturing industry is defined by low-wage, heavy-duty, repetitive employment and position burdened personnel (Chen *et al.*, 2020). The development of outstanding

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management is the most critical feature of manufacturing industries. Specifically, organizations need leaders who lead with purpose, have strong values and integrity, who can create enduring organizations, and who persuade their people to deliver better consumer service (George, 2003). Authentic leaders are authentic and will promote esteem, reputation and confidence among workers (Li *et al.*, 2018). They should concentrate on productive psychological potential and positive ethical actions, establish harmonious leadership-follower partnerships, and cultivate an environment of self-development in the workplace. Transformational leadership is also in line with the main goal of the manufacturing industry.

Academics and professionals believe that human capital is beyond question as one of the most valuable tools in the service and manufacturing sector (Andersson *et al.*, 2020). Constant demand for a special and efficient service from business managers and consumers, long working hours and poor wages are the prevailing causes of friction that lead to workforce reduction in an organization. We are of the view that transformational leadership will play an important position in this respect. With a growing trend in rates of unemployment, an increase in the volume of activities to be completed, and a loss of enthusiasm, workers may become disengaged and consequently develop detrimental actions (Greenstone *et al.*, 2020). In order to keep workers away from unhealthy habits such as deviant behavior at work, mental fatigue, burn-out and ill-health, Amunkete and Rothmann (2015) conclude that transformational leadership may be the most successful form of leadership to resolve these problems and ensure a culture whereby employees participate in meaningful and efficient work. He indicates that the impact of transformational leadership on the outcome of workers, such as well-being, employee performance, work satisfaction and organizational involvement, have been experimentally evaluated and checked, but there is still a great deal to be done in expanding this body of knowledge to cover other consequences such as stress and exhaustion, work motivation and mental fatigue.

The ongoing economic development in Asian markets such as India, China, Indonesia, Taiwan, Malaysia, South Korea, Thailand and Vietnam is expected to expand (Bharwani and Jauhari, 2013). Because of this, globalization, and the growth of manufacturing companies in these nations (McGehee *et al.*, 2015) has become apparent, creating a growing number of domestic and foreign consumers. Vietnam is expected to experience growth in the manufacturing sector due to a rising number of middle-class customers. MNCs are therefore quite labor-intensive and the fuel for expansion in these countries is scarce. (Nguyena *et al.*, 2020). Montague (2013), published on skilled labor scarcity in the manufacturing sector in Vietnam and reiterated the scarcity of trained jobs in Ho Chi Minh's growing manufacturing sector. Exports and brain drain of qualified labor are obviously going to exacerbate the conditions (Nguyena *et al.*, 2020). Foreign and domestic labor migrations (Minh-Duc and Huu-Lam, 2019) are obviously going to resolve labor shortage problems, and more professional employees of varied backgrounds are projected to enter the manufacturing industry in Asian developing countries.

Despite its importance, in comparison with other contextual factors, the moderating role of organizational size, attracts less attention. It is evident from the extant literature that the leadership effect on tinier organizations is stronger than on bigger organizations (Koene *et al.*, 2002). According to Vaccaro *et al.* (2012) transformational leadership is emotionally contagious and the impact of transformational leadership will depend upon organizational size (Lux *et al.*, 2019; Tak *et al.*, 2019). They used moderating role of size as a vantage point in their study; investigating the effects of transformational leadership on intention to leave both in larger and more complex organizations and also in smaller ones and found size as a tipping point in employees intention to leave. But the empirical results on the relationship between them are inconsistent and mixed. It is clear that in organizational settings, organizational size has been used as a control variable. From literature, we can see that transformational leadership has an impact on organizational size and innovation, even though, the literature does not clearly discuss the buffering effect of organizational size as an important variable in the relationship between turnover intention and leadership styles.

All in all, few such studies have studied the relationships between leadership, work commitment, job performance and attrition among employees in the manufacturing sectors in Vietnam. This study attempts to address this void. Explicitly, the goal of this analysis is to investigate the effect of transformational leadership, work engagement, job satisfaction, organizational size, and turnover intention among employees from MNCs in Vietnam. The findings of this research can enable industry players to recognize how leaders and workers may contribute to the reduction of attrition intentions and, as a result, to improve tools, programs, and policies to encourage these essential behaviors. Much of this article is structured accordingly.

In the first part, which is focused on previous studies, the writers propose the formulation of a research hypothesis. As in second segment on technique, the writers discuss approaches and steps for data processing. The third segment reports the review of the data and the key findings of the study. Finally, the writers address the analytical and realistic ramifications of the results of the thesis for leadership academics as well as practitioners, highlight the shortcomings of previous analysis and propose directions for potential research.

## **2. Theories and Research Hypotheses**

### **2.1. Transformational leadership and Work Engagement**

Job involvement defines the state of mind in which workers display vigorous attention and devotion to work and a strong degree of interest at work (Bamford *et al.*, 2013). Previous studies have demonstrated that it has a beneficial impact on staff engagement and retention, consumer loyalty, efficiency, and overall profitability. Relatively similar meta-analysis described leadership as one of the key factors leading to performance management. The social background is critical and can set the stage for an atmosphere of interaction in an important leadership position (Bakker *et al.*, 2011). Meaningful administrators operate in line with their beliefs and aim for transparency

and authenticity in their interactions with supporters. These administrators set an example and demonstrate straightforward decision-making (Kulophas *et al.*, 2015; Walumbwa *et al.*, 2008). Setting an example shows the dedication of managers to their job and gives feedback to followers about how to be physically and emotionally engaged in the job they do, which can improve the degree of work involvement via observation and imitation. When followers internalize the principles and ideals revealed to them by a true leader, the followers, in compliance with the authentic phase of leadership creation, alter their self-perceptions in the actual state and, thus, what they can become. Transformational leadership influences the fundamental drive (Arokiasamy, 2013; Chaudhary and Panda, 2018). Literature review on workforce diversity, employee performance and organizational goals: A concept paper. *Researchers World*, 4(4), 58.). Workers take the first step toward their own growth, when they understand that they may do more than they had previously believed. It is not a matter of converting followers to the expectations of the boss, but rather of more engaged constructive self-development by followers on the basis of the manager's example (Avolio *et al.* (2004). Therefore, followers act in the path of constructive thought, building self-confidence and inspiring optimism on their own. This can be expressed in their dedication to work. In the context of the inquiry alluded to above, the following conclusions are set forward:

**Hypothesis 1:** Employees' perception of transformational leadership has a positive effect on their work engagement.

## **2.2. Work Engagement and Turnover Intentions**

Timms *et al.* (2015) stresses the close connection between dedication and the desire to make a turnaround. Commitment creates effective, optimistic job-related interactions and a state of mind that is associated with healthy thinking and a progressive attitude. These favorable interactions and feelings will ensure workers are more likely to contribute to productive work-related results, and will be more supportive of their bosses and less willing to leave the organization (Caesens *et al.*, 2016). In addition, engagement theory indicates that accessibility, significance and protection are important prerequisites for engagement (Bhatnagar, 2012). Consequently, one's happiness with the organization's expenditure in training and growth (i.e., availability) will offer workers a sense of value (i.e., relevance). Therefore, workers will feel comfortable and confident in their current jobs and prefer not to pursue alternative employment opportunities. Previous findings show that commitment is a good indicator of employee dismissal intentions. Zhao and Zhao (2017), stated that the dedication is negatively related to the affective commitment of workers in China. Similarly, in their meta-analytical analysis, Bailey *et al.* (2017) analyzed 21 research sources in which there was a substantial negative association between loyalty and employee attrition intentions, thereby presenting clear proof of a correlation between the frameworks. We however hypothesize the following:

**Hypothesis 2:** Employees' perception of work engagement has a negative effect on their turnover intention.

## **2.3. Work Engagement Mediates the Relationship between Transformational Leadership and Turnover Intention**

While it is critical that real leadership is related to the attitudes and behaviors of followers, job engagement is rarely seen as a mediator of ties between true leadership and the aim to reduce turnover (Gupta and Shaheen, 2017). Job engagement requires an intimate and emotional attachment to an institution, through defining corporate objectives and ideals, in which an individual is a worker. This indicates that the dedication to work provides a feeling of identity in the business. A meta-analytical analysis has shown that job participation is seen as the most relevant explanatory predictor of corporate loyalty, as it works to maintain continuity of staff owing to its close ties with sales and withdrawal cognitions (Laschinger, 2012). So, we should reflect on the degree of staff involvement.

We conclude that an authentic leader will create good partnerships focused on constructive social exchanges to boost the workforce of the company (Ilies *et al.*, 2005; Walumbwa *et al.*, 2008). Because honest leaders are viewed by their followers as open, they comply with honest principles, avoid partisan decisions and better place themselves to create trust-based relationships that allow social exchanges which encourage greater employee engagement. Empirical research on mixing sincere leadership with dedication to the job reinforce our claim that honest leadership is expected to be a definitive factor in worker commitment levels (Gutermann *et al.*, 2017; Huynh *et al.*, 2014). Thus, we hypothesize for the purpose of this analysis, based on previous results:

**Hypothesis 3.** The relationship between transformational leadership and turnover intentions is mediated by work engagement.

## **2.4. The Moderating Role of Job Satisfaction in the Relationship between Work Engagement and Turnover Intention**

There are many reasons to endorse the idea that workplace engagement moderates the connection between work commitment and the intent of attrition. Rasoolimanesh and Ali (2018), propose that work satisfaction raises the degree of psychological and emotional relations between workers. This, in essence, allows them to demonstrate commitment and to associate with and be interested in the accomplishment of the aims of the company. As workers see their company as offering attractive incentives, promotional benefits, and better working arrangements (indicative of employee satisfaction), they are more likely to be excited, proud, and comfortably engaged in their careers. They will be loyal to and devoted to their supervisor. When workers perceive prospects for advancement, encouragement from a professional supervisor, and a supportive working environment, they are more inclined to be committed, actively involved, proud and truly engaged in their jobs. Such favorable interactions contribute to lower turnover intentions and stronger loyalty to the company (Luu, 2020).

Liu *et al.* (2018), propose that career satisfaction facilitates the interrelationship between dedication to employment or making a decision to leave. A higher degree of happiness is related to a staff member’s emotional attachment to the company, increased role efficiency and decreased organizational commitment (Carter *et al.*, 2016; Lin *et al.*, 2013). Bednarska (2017), suggests that work commitment and job satisfaction mediate the interaction between organizational identification help and value congruence. (Wadhwa and Bano, 2020) assert that career satisfaction reflects work participation. The shortcomings of previous studies (Mitonga-Monga, 2019; Singh and Jain, 2013) indicate that there is a need for study on the effect of work involvement on the motivation of employees that interacts with job satisfaction. Considering the evidence on employee performance as a history of dedication to work and of staff attrition, this research suggests that happy workers are more likely to be motivated, proud and interested. They would also have more commitment to their jobs, remain loyal to the company, and maintain the job partnership. The following research hypothesis is therefore:

**Hypothesis 4.** Job satisfaction moderates the relationship between work engagement and turnover intention

## 2.5. The Moderating Role of Organizational Size in the Relationship between Transformational Leadership and Turnover Intention

Factors such as technology, structure, size and external environment influence leadership and its effectiveness and are context dependent. Schreck and Raitzel (2018) Being considered as capturing the scope of organizational complexity and increased communication, organizational size can be a boundary condition for the predicted relationship between turnover intention and transformational leadership. Beerepoot *et al.* (2019) Organizational performance and organizational size have been related according to past research (Bontis *et al.*, 2007; Ranger-Moore, 1997). Smaller firms lack financial resources which are important for the firm’s performance, while larger firms perform better than smaller firms (Davis *et al.*, 2019; Klatzky, 1970). Greater firm size is important (McKendrick and Wade, 2010) as it can bring in additional benefits like reputation, sophisticated management expertise, ability to bear environmental shocks, and more planning activities (Geiger and Cashen, 2007). Size and the firm’s development are closely related. Real *et al.* (2014), says there are several advantages in the ability of a large size firm to conduct work engagement activities. Previous research reveals the positive relationship between organizational size and engagement (Real *et al.*, 2014).

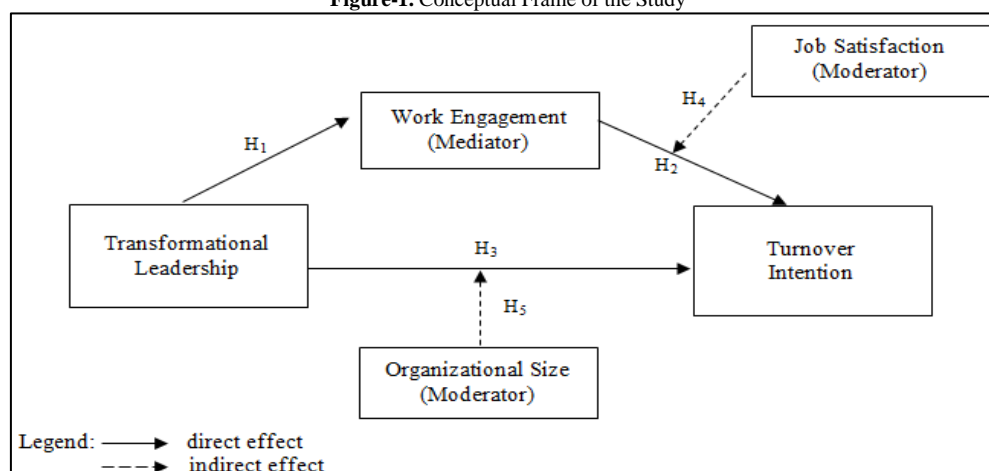
Positive emotions expressed by authentic leaders are likely to propagate and resonate through mechanisms of social contagion, resulting in the emotional growth of organizational participants being encouraged positively and the attrition rate being reduced. Therefore, a significant point here is that genuine habits of leadership are passed on Avolio and Gardner (2005). In a study by Leroy *et al.* (2015) have proposed that transformational leadership values are reproduced by others through imitation and observational learning and inspire others into action. Transformational leadership behavior is cascaded through various departmental, teams or divisional members that foster that habit and build a long-lasting relationship with their employees. Exception to this is when the organization size is large and have many layers of authority, employees might not perceive their leaders as being authentic in their style of management.

Following from this reasoning, we believe that it could be hypothesized that the effects of transformational leadership on employees’ turnover intention would be stronger in larger organizations compared to smaller ones. Consequently, those employees who perceive higher levels of transformational leadership within their organization may choose to remain there largely because they want to, rather than through a sense of need or obligation (Jensen and Luthans, 2006). The present study therefore views the role of organizational size as a moderator of the relationship between transformational leadership and turnover intention.

**Hypothesis 5.** Organizational size moderates the relationship between transformational leadership and turnover intention

This article uses a conceptual model (Figure 1) according to the above hypotheses. In this model, transformational leadership and work engagement are regarded as independent variables and turnover intention is a dependent variable. In this study, we propose to test job satisfaction as a moderator in the relationship between work engagement and turnover intention and organizational size as a moderator in the relationship between transformational leadership and turnover intention.

Figure-1. Conceptual Frame of the Study



### 3. Method

This section describes the measures, details on the sample, and data analysis techniques.

#### 3.1. Measures

We used validated scales that stressed reliability and validity to quantify our variables in the sample. We also broke the independent variables into different questionnaire parts maintaining the confidentiality of respondents and to reduce the impact of common method variance (CMV) (Podsakoff, 2003). We ensured that there were no correct or incorrect responses and we urged participants to address the questionnaires frankly and intuitively. No other steps were included in the questionnaire to ensure that the questionnaire was focused and encouraged maximum participation. The final section covered questions related to the socio-professional features of participants, such as age, ethnicity, experience, organizational tenure, employment role and schedule form.

#### 3.2. Transformational Leadership

The transformational leadership variable was measured within 16-items of the questionnaire developed by Walumbwa *et al.* (2008). It assessed the four aforementioned transformational leadership dimensions and encompassed items like “your leader [. . .] seeks feedback to improve interactions with others” (i.e., self-awareness) and “[. . .] is willing to admit mistakes when they are made” (i.e., relational transparency). Other items were “your leader [. . .] makes decisions based on his/her core beliefs” (i.e., internalized moral perspective) and “[. . .] listens carefully to different points of view before coming to conclusions” (i.e., balanced information processing). The average employee feedback resulted in an aggregate transformational leadership ranking of 1 to 5. Higher scores indicated respondents were more respectful of their representatives. Cronbach  $\alpha$  was .89, which showed a strong level of consistency.

#### 3.3. Work Engagement

Here we followed the work engagement structure of Schaufeli *et al.* (2002) consisting of 4-items for each of the three dimensions, vigor, commitment, and absorption. For vigor (e.g., “I feel solid and vigorous at work”), for determination (e.g., “my career encourages me”) and finally for acceptance (e.g., “time passes while I work”). Alpha reliability was already recorded to be between 0.81 and 0.96. Each object was scored on a 5-points Likert scale (1= never, 5= always). The reliability coefficient for the present analysis was 0.87.

#### 3.4. Turnover Intention

A 3-items scale created by Cammann *et al.* (1979) was used for this analysis to assess the purpose of retention. In the variable study which they carried out the three elements were different from each other. The accuracy of this analysis was 0.82. An illustration of one response was, “I’ll quit the organization as soon as I can find an appropriate career.”

#### 3.5. Job Satisfaction

The Job Satisfaction Questionnaire (JSQ) consisted of a 20-items self-reporting indicator of employee satisfaction in terms of measurements, including: salary, advancement, boss, co-worker, and self-employed. The JSQ is graded on a 5-points Likert scale, varying from 1 = strongly disagreed, to 5 = strongly accepted (Locke, 1970). Mobley (1977), registered alpha coefficients of Cronbach, varying from 0.76 to 0.89. The current review produced alpha coefficients of Cronbach, varying from 0.72 to 0.92 for JSQ results.

#### 3.6. Selection of Samples and Data

A convenience sample of employees from sixteen manufacturing companies operating in Ho Chi Minh City, Vietnam were distributed with a self-report questionnaire for confirmation of the study hypotheses. Paper and pencil formats as well as websites (google-docs) were released for respondents to expand the number of participants. The usable configuration relied on the sort of configuration that the manufacturing industry required. The social networks included the questionnaire and a call for the inclusion of workers from the manufacturing sector in the report. 652 respondents were included in the final sample after the exclusion of blank questionnaires. Most of the participants were men comprising, 87 percent, the majority age group was between 30-39 (48.6%) with a higher diploma (54.7%) and working a rotating 12-hour shifts (81.8%). Most of the participants had between 3 to 5 years of work experience in the manufacturing sector (42.7%) followed by 27.4 percent with experience ranging between 5-10 years. The final sample consisted of 652 employees. The average number of respondents per organization was 53 (range=7-129). About 50.7 percent were paid approximately USD900-USD3,000 per month.

Table-1. Sample Demographic Variables

Variables	Values	Frequency	Percentage
<i>Gender</i>	Female	85	13
	Male	567	87
<i>Age</i>	19-25	14	2.2
	26-29	53	8.1
	30-39	317	48.6
	40-49	190	29.2

	≥ 50 years	78	11.9
<b>Education</b>	Higher Diploma	357	54.7
	Undergraduate degree	221	33.9
	Postgraduate degree	69	10.6
<b>Shift Work</b>	12-hours rotating work	533	81.8
<b>Experience at this establishment</b>	≥ 1 but less than 3 years	123	18.8
	≥ 3 but less than 5 years	278	42.7
	≥ 5 but less than 10 years	179	27.4
	≥ 10 years	72	11.1
<b>Position</b>	Receptionists	11	1.7
	Office Manager	88	13.5
	Production Manager	84	12.8
	Middle-level managers	89	13.6
	Production Coordinator	73	11.2
	Assembly & Fabrication Operators	221	33.9
	Others	87	13.3

### 3.7. Control Variables

The study covered factors of age, ethnicity, literacy, and tenure, all of which may influence the attitudes of workers towards the organization (Zenger and Lawrence, 1989). In addition, Beecroft *et al.* (2008) posited, organizational tenure, education and sex were closely related to the calculation of turnover intentions. The following are the socio-demographic factors measured. Participants were first asked to demonstrate in years their age and length in their business. For sex, male-0, and female-1, has been coded. Education was coded as 1 for higher diploma, 2 for undergraduate degree, and 3 for postgraduate degree. Finally, for the work experience, 1 was coded as between 1 to 3 years, 2 was coded as between 3 to 5, 3 was coded as between 5 to 10 and 4 was coded as anyone who has worked for more than 10 years in the establishment.

### 3.8. Common Method Bias and Non-Response Bias

“The association between constructs can be increased or decreased by common method bias when data are collected from a single source” (Podsakoff, 2003). To reduce evaluation anxiety of the participants, we emphasized that there were no right or wrong answers and assured the confidentiality and anonymity of participants in the cover letter. We followed Fuller *et al.* (2016) recommendation by conducting Harman’s single-factor test to report CMV. Common method bias can be a critical issue if a first factor accounts for more than 50 percent of the variance among variables (Fuller *et al.*, 2016; Peus *et al.*, 2012). We were pleased to report no CMV problem in the study.

### 3.9. Preliminary Analysis

Until the conclusions were checked, the analysis checked the results for outliers and missing events. This culminated in the exclusion of three instances from the data collection. After that, a confirmatory factor analysis (CFA) was carried out on all the scales, including several objects and the review was concluded. The research used “AMOS software package version 24.0” and implemented the maximum probability estimator. The study therefore identified transformational leadership, work engagement, job satisfaction, organizational size, and retention expectations as first-order frameworks. The findings obtained from “CFA” revealed that three elements in the turnover intention construct had poor predictor reliability, suggesting that only a limited amount of variation was clarified by the postulated latent factor (Schreiber *et al.*, 2006). Consequently, these elements were omitted in the report. Rejecting the three objects, the findings showed that the model suits the data well: ( $\chi^2=164.832$ ;  $DF=113$ ;  $p<.001$ ;  $CMIN / DF=1.517$ ;  $CFI=0.959$ ;  $TLI=0.951$ ;  $RMSEA=0.056$ ) (see thresholds in e.g. Byrne (2001). In addition, both scales displayed adequate convergent validity, i.e. composite reliability figures above .70 and average variance extracted (AVE) values above .5 for each element (Fornell and Larcker, 1981). Discrimination in legitimacy was evaluated at a following stage. Following Fornell and Larcker (1981) the AVE should be higher by each component than the square correspondence for each of the other model variables. This criterion was fulfilled, i.e., the lowest AVE is .543, and the largest squared correlation around factors is .192, thereby implying that the factors are distinct. Similarly, strong discriminatory and convergent reliability suggest that CMV did not have a significant effect on our results. A traditional latent factor test was performed to further support this (Podsakoff, 2003). The findings of this study again suggest that CMV was not a crucial issue in the details, i.e., the mean variance in the uniform regression weights of the indicator factor loadings between the model with and the model without a typical latent factor was negligible (Est.=0.037). Finally, to reduce the propensity for multicollinearity, all predictive variables prior to review were based on Aiken *et al.* (1991).

## 4. Results

### 4.1. Descriptive Statistics

The means, standard deviations and inter-correlations of the variables are summarized in Table 2. To test our hypotheses, we applied the “IBM SPSS software package version 24.0” and the “PROCESS-tool”<sup>1</sup> (Hayes and Scharkow, 2013).

Table-2. Means, standard deviations and inter-correlations

Variable	Mean	S.D.	1	2	3	4	5	6	7	8
1. Organizational size	2.11	0.37								
2. Age	39.8	8.49	1.00							
3. Gender	0.57	0.64	0.03	1.00						
4. Experience	5.25	7.14	0.61**	0.22*	1.00					
5. Education	3.15	0.78	0.33**	-0.01	0.28	1.00				
6. TL	0.79	0.44	-0.36**	0.30**	0.18	0.14	1.00			
7. WE	3.89	0.58	0.07**	0.05	0.32**	-0.07	0.02	1.00		
8. JS	3.96	0.41	0.00	-0.01	-0.04	0.03	0.01	0.43**	1.00	
9. TI	3.74	0.62	0.06	0.18*	0.03	0.17*	0.08**	0.41**	0.38**	1.00

Note: N=457, \*\* $p < 0.05$ , \* $p < 0.01$ . 2= age, 3= gender, 4= experience, 5= education, 6= transformational leadership (TL), 7= work engagement (WE), 8= job satisfaction (JS), 9= turnover intention (TI).

### 4.2. Measurement Model

Table 3 presents the measurement model fit indices for the study variables. We conducted CFA using AMOS software package version 24.0 to examine the construct validity of the variables. As shown in Table 3, the fit indices support the hypothesized four-factor model of transformational leadership, work engagement, job satisfaction, organizational size and turnover intention ( $\chi^2 = 332.08$ ;  $df = 189$ ; RMSEA = 0.04; CFI = 0.87 and TLI = 0.93) and yielded a better fit to the data than the three-, two- and one-factor models. These CFA results confirm the distinctiveness of the four study variables for subsequent analyses (Table 3).

Table-3. Chi-square difference tests among alternative measurement models

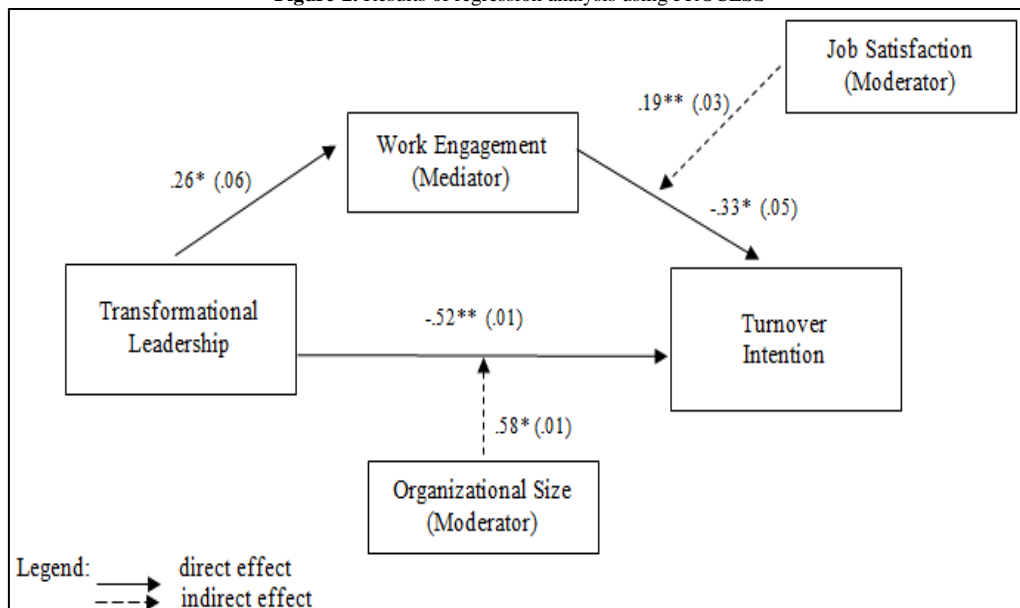
Model	$\chi^2$	df	CFI	TLI	RMSEA	$\Delta df$	$\Delta \chi^2$
4-Factor model (hypothesized model)	332.08***	189	0.87	0.93	0.05	-	-
3-Factor model (TL, WE & OS merged)	479.39***	202	0.82		0.88	0.11	3
2-Factor model (TL, WE & JS merged)	681.06***	204	0.74	0.73	0.14	5	482.91***
1-Factor model (all variables merged)	873.56***	205	0.66	0.56	0.15	6	695.48***

Note: N=457, \*\*\* $p < 0.001$ , TL= transformational leadership, WE= work engagement, JS= job satisfaction, OS= organizational size, CFI= comparative fit index, TLI= Turkey-Lewis Index, RMSEA= root mean square error of approximation.

### 4.3. Hypotheses Testing

Hypothesis 1 proposed that transformational leadership would be positively related to work engagement. The results from the analysis (Figure 2) support this assumption ( $\beta = 0.26$ ,  $SE = .07$ ,  $p < 0.05$ ). Hence,  $H_1$  was accepted. Hypothesis 2 posited that work engagement would be negatively related to turnover intention. The inspection of the relationship between work engagement and turnover intention ( $\beta = -0.33$ ,  $SE = .04$ ,  $p < 0.05$ ) supports  $H_2$  indicating that the stronger the employees' perceptions of work engagement are, the less the respondents were likely to form an intention to leave their organization.

Figure-2. Results of regression analysis using PROCESS



Note: N = 652, \* $p < 0.05$ , \*\* $p < 0.01$

Hypothesis 3 projected that the partnership between transformational leadership and the desire to leave will be mediated by the work engagement. The Monte Carlo Confidence Interval Method (Preacher and Selig, 2012) utilizing the prescribed 10,000 simulations showed that the uniform indirect impact of transformational leadership on turnover intention through work engagement was important (indirect effect =  $-.52$ , CI 95 percent,  $[0.05, 0.14]$ ,  $p < 0.01$ ). Since zero is not included in the 95% confidence interval for indirect results,  $H_3$  has been supported (see Table 4). Moreover, there was a clear indirect impact of transformational leadership on turnover intention ( $\beta = -.52$ ,  $p < 0.01$ ), that is to say, transformational leadership had a special partnership with the aim of turnover, even after managing the effort for work engagement. Overall, after correcting the biasing consequences of the estimation mistake, the hypothesized mediation model clarified a large sum (52%) of the turnover variance.

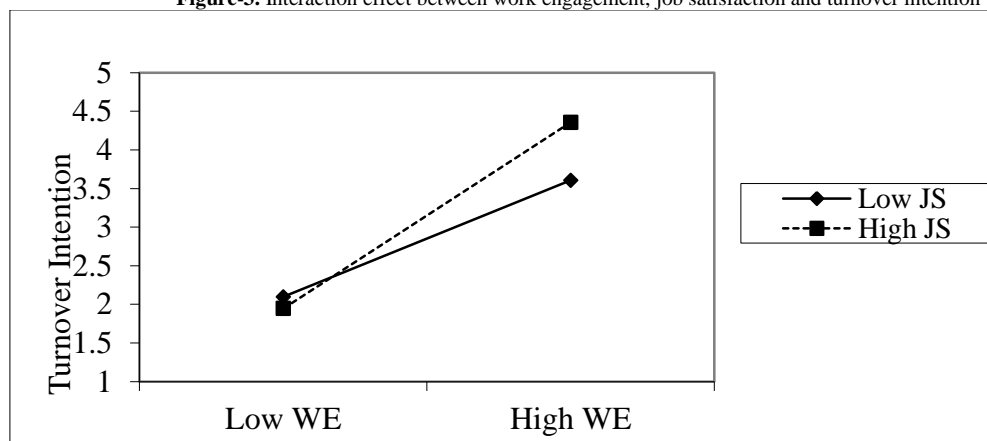
Table-4. Mediating Effect of Work Engagement

Path	Direct Effect	Indirect Effect	SE	LL95% CI	UL95% CI
TL→WE→TI	-.59**	-.52**	0.03	[0.05, 0.14]	[0.04, 0.24]

Note: N=652, TL = transformational leadership, WE = work engagement, TI = turnover intentions, SE = standard error, CI = confidence interval. \*\* $p < 0.01$

In Hypothesis 4, the research hypothesized that job satisfaction will moderate the connexion between work engagement and the intention of turnover. Before creating the interactive term, we first adjusted the average of all relevant variables to 0 to avoid multicollinearity with the product term (Hayes and Scharkow, 2013). All tolerance values in our regression were above 0.4, and variance inflation factors were below three, indicating that multicollinearity was not an issue in this study (Kline, 2005). The inspection of the significant relationship concept ( $\beta=0.19$ ,  $SE=0.03$ ,  $p<0.01$ ) is provided by  $H_4$ . In order to better understand the essence of the established moderating impact of job satisfaction on the interaction among work engagement and turnover intention, a plot of the interaction effect was formed (Aiken et al., 1991). As shown in Figure 3, marked job satisfaction has a positive effect and confirms the negative association between work engagement and turnover intention. The most important result of the moderating test study was that job satisfaction reliably moderated the relationship between work engagement and turnover intention. The findings suggest that the link between work engagement and turnover intention was greater for employees with a high degree of job satisfaction.

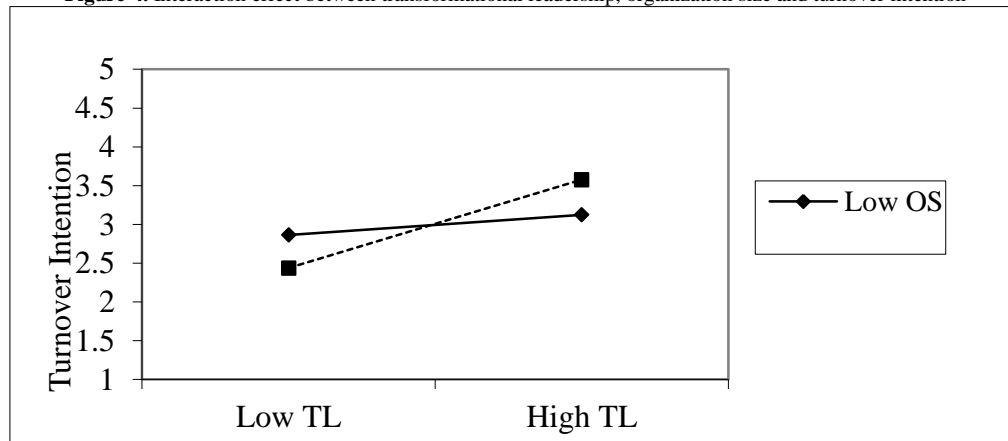
Figure-3. Interaction effect between work engagement, job satisfaction and turnover intention



In Hypothesis 5, the research hypothesized that organizational size would moderate the connexion between transformational leadership and the turnover intention. Before creating the interactive term, we first adjusted the average of all relevant variables to 0 to avoid multicollinearity with the product term (Hayes and Scharkow, 2013). All tolerance values in our regression were above 0.4, and variance inflation factors were below three, indicating that multicollinearity was not an issue in this study (Kline, 2005). The inspection of the significant relationship concept ( $\beta=0.58$ ,  $SE=0.01$ ,  $p<0.05$ ) is provided by  $H_5$ . In order to better understand the essence of the established moderating impact of organizational size on the interaction among transformational leadership and turnover intention, a plot of the interaction effect was formed (Aiken et al., 1991). As shown in Figure 4, marked organizational size has a positive effect and confirms the negative association between transformational leadership and turnover intention. The most important result of the moderating test study was that organizational size reliably moderated the relationship between transformational leadership and turnover intention. We can see that in larger organizations, in comparison to their smaller counterparts, the positive relationship between transformational leadership and turnover intention was greater.



Figure-4. Interaction effect between transformational leadership, organization size and turnover intention



#### 4.4. Model Fit

The coefficient of determination ( $R^2$ ) is an indicator of the predictive ability of the formula.  $R^2$  is the sum of variation in the organic dependent variable of the conceptual model described by the exogenous (independent) constructs related to it. The values of  $R^2$  vary from 0 to 1. The greater the  $R^2$  value, the more the implicit structure is described in the conceptual framework. The large  $R^2$  coefficient also indicates that the values of the variables can be well estimated by the direction model (Hair Jr *et al.*, 2017). The value of  $R^2$  for turnover intention was 0.523 which suggested that 52.3 percent of the overall variance of the endogenous construct turnover intention may be clarified by the exogenous construct such as transformational leadership, work engagement, organization size, and job satisfaction. In comparison,  $R^2$  values and the impact on endogenous latent variables in behavioral sciences can be measured as 0.27 (large effect), 0.14 (moderate effect) and 0.03 (low impact). Because the values of  $R^2$  for the purpose of turnover intention was larger than 0.27, the test of this analysis confirmed the accuracy of the sample results.

### 5. Discussion

Transformational leadership encourages the participation of workers ( $H_1$ ), according to the findings. The results illustrate the reality that transformational leadership has a beneficial influence on their organization's loyalty to staff (Alok and Israel, 2012; Bamford *et al.*, 2013; Wang and Hsieh, 2013). When leaders are viewed as more authentic (i.e., relatively open, truthful and forthright in the process of providing balanced information), they wish to stay inside the company essentially because they desire it and do not want to sacrifice the opportunities that their position offers. Follower's practicing core values or core value behavior can be improved and facilitated by leaders' transformational leadership. It is noticeable that this finding can be interpreted in such a way that when leaders are considered a role model by their followers, they can be strong determinants of employees' personal practicing core values (Hsieh and Wang, 2015). It is obvious that the willingness of employees to work, show commitment, and engagement at work will improve, when leaders consist of positive influencers and practice the organization's core values.

As expected, the structural model assessment confirmed that work engagement negatively related to employee turnover intention ( $H_2$ ). Engagement is concerned with investing wholly in performing one's role; therefore, being physically, emotionally, and cognitively involved with one's work and with the organization, and reduces the likelihood of employees leaving the organization (Caesens *et al.*, 2016; Karatepe and Ngeche, 2012). The results of the present study support the results of previous studies and finding that highly engaged employees are less likely to leave their organizations (De Villiers and Stander, 2011).

The findings of the present study offer empirical proof that work engagement mediates the partnership between transformational leadership and the desire to leave ( $H_3$ ). Previous studies have documented that transformational leadership has a harmful adverse effect on the turnover intention of American employees by work engagement in the hospitality provider's industry. Authentic leaders are viewed as straightforward by their supporters because they are behaving with honesty, resisting prejudice in judgments, and placing themselves in a stronger position to establish trusting partnerships (Mañas-Rodríguez *et al.*, 2020). Therefore, these activities help staff feel more dedicated to their company, thus ensuring a reduction in the intention for turnover among personnel. As per the principle of affinity (Arokiasamy and Tat, 2020; Diddams and Chang, 2012), transformational leadership can enable workers to feel an affective connection to their job, which in turn decreases their intention to leave the organization.

The findings suggest that job satisfaction moderated ( $H_4$ ) the willingness of workers to work and the frequency of attrition of the organization; thus, they chose to continue their work indefinitely. This may be clarified by the fact that when workers score high on job satisfaction parameters, they can react with a high degree of work engagement (de Klerk and Stander, 2014) and indicate their obligation to start working in the company (Park and Gursoy, 2012). These results reflect that of the previous research by Gutermann *et al.* (2017) which showed that work satisfaction was a core predictor of job retention and that contented workers were more likely to be committed, loyal and mentally connected to the company. Satisfied workers are expected to show higher levels of job participation, which, in essence, would affect their loyalty to the company and eventually improve the company's competitive edge (Alarcon and Edwards, 2011; Bakker *et al.*, 2008) and at the same time decreasing their willingness to exit the

company. The findings also suggested that organizational size moderated ( $H_5$ ) the relationship between transformational leadership and turnover intention. Our results indicate that the relationship between transformational leadership and turnover intention is stronger in larger organizations than in smaller organizations (Lee and Xia, 2006). Larger organizations facilitate employees' aspiration for organizational innovation and their adoptive behavior. Most MNCs have a synchronized program and structure for encouraging employees to become involved in company activities, thus leading to greater involvement and engagement thus reducing the turnover intention of employees. We can see that smaller firms are not able to perform like larger firms as the former lack financial resources, while the latter have aggregated inputs (Khan *et al.*, 2009). The turnover intention of employees will be lowered when they find stability and security within the organization. Mabert *et al.* (2003), highlighted the importance of greater firm size as it enables additional benefits such as sophisticated management expertise, more planning activities, reputation, increased visibility, and the ability to bear environmental shocks.

### **5.1. Theoretical Contributions**

The above findings have possible ramifications for corporate philosophy and management. The research argues that, from a theoretical point of view, transformational leadership has a substantial influence on job satisfaction and the purpose of turnover. Furthermore, literature has not adequately explored the moderating role of job satisfaction in the partnership between work engagement and turnover intention. Thus, the review of these mediating and moderating impacts addresses a major omission. This study was groundbreaking as all these factors were combined into a common research paradigm. In the research project, the function of mediation and moderation between transformational leadership and the goal of turnover was re-examined, and some previously studied associations were re-examined, and new suggestions made. This study of the previously checked link between constructions was considered as significant because of the replication crises in social sciences as an exploration of new relationships, particularly in a different context and culture. Empirical analysis has scarcely explored transformational leadership and its implications in manufacturing settings in particular (Bothma and Roodt, 2012; Engelbrecht *et al.*, 2014). The study aimed to help to bridge this gap by studying the mediatorial and moderator position of variables among employees of Vietnamese manufacturing organizations, in the ties between transformational leadership and turnover intention.

### **5.2. Managerial Implications**

Second, because of the indirect correlation between transformational leadership and staff attrition, businesses should be mindful of the efficacy of honest leadership in minimizing employee turnover intention. Considering the workers' degree of dedication, organizations should frequently encourage employees to understand why such behavior arises. It is also rational that true leaders be selected and trained to encourage employee engagement. In this sense, solid implementation of leadership programs, to foster true leadership conduct amongst managers, should be developed (Vogelgesang *et al.*, 2013) with a view to encouraging constructive attitudes which will ensure that valued workers are retained. To be able to follow more authentic management behavior, management must make an effort to inspire representatives at various levels of organization (Zhu *et al.*, 2009). Learning or mentoring services may thus be developed to help employees consider their own talents and shortcomings and how their actions impact followers. Critical input should be made available to representatives before making any significant judgment without concern that a negative input may lead to an adverse reaction. It should include all relevant knowledge, as well as any relevant thoughts, opinions, and emotions and should be driven by moral principles and expectations.

Transformational leaders with dynamic skills improve organizational commitment, and organizational size is an important factor in such partnerships. Larger organizations have more resources to assist exhibit leaders, charisma, inspiration, employee stimulation and other factors that may promote organizational participation. Hence the leaders of larger organizations may more confidently take measures to enhance engagement within the organizations and in such relationships organizational size plays as a facilitator. Because of the measures taken by leaders to increase organizational dedication and efficiency, large organizations with sufficient resources can accommodate any consequences (Tohidi, 2011). Since the manufacturing industry is characterized by intense competition, the effects of these activities are particularly important.

### **5.3. Limitations and Future Research Directions**

Some drawbacks to providing potential research opportunities were presented in the current review. One such drawback is the sampling of ease, which has depended on a reasonably broad sample size but has not been followed by a probability process that reduced the generalization of the outcomes. Future study in this subject area may require more diverse, representative samples to ensure that the remainder of the Vietnamese manufacturing industry is included. Through obtaining data on samples from other contexts and societies, researchers may test the common application of current results. Furthermore, the data were extracted from a single source (i.e.) which may raise the probability of inflating ties between the research variables (the respondents rated the predictive, mediating, moderating and results variables). Various steps were taken in the design of the questionnaire to avoid prejudice from a common source, including ensuring that there were no correct or misrepresented responses to the questionnaire (Podsakoff, 2003). The usage of CFAs to assess the distinguishing and convergent validity of the model indicates that common source distortion in the research data was not a serious threat. However, potential research may determine this manipulation by gathering data from multiple sources at different periods. Future studies may include a longitudinal study to explore underlying causal associations. Finally, only one mediation component was used in this analysis, although others are possible. Transformational leaders will, for example,

increase employee satisfaction within their teams, thereby stimulating employee orientation and minimizing turnover intention. Given these constraints, this study adds to the field of leadership analysis in manufacturing environments by exploring the effect of transformational leadership has had on employee engagements and behaviors.

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## References

- Aiken, L. S., West, S. G. and Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Alarcon, G. M. and Edwards, J. M. (2011). The relationship of engagement, job satisfaction and turnover intentions. *Stress and Health*, 27(3): e294-e98.
- Alok, K. and Israel, D. (2012). Transformational leadership and work engagement. *Indian Journal of Industrial Relations*, 3(6): 498-510.
- Amunkete, S. and Rothmann, S. (2015). Transformational leadership, psychological capital, job satisfaction and intention to leave in state-owned enterprises. *Journal of Psychology in Africa*, 25(4): 271-81.
- Andersson, D. I., Balaban, N. Q., Baquero, F., Courvalin, P., Glaser, P., Gophna, U. and Tønjum, T. (2020). Antibiotic resistance: turning evolutionary principles into clinical reality. *FEMS Microbiology Reviews*, 44(2): 171-88.
- Arokiasamy (2013). Literature review on workforce diversity, employee performance and organizational goals: A concept paper. *Researchers World*, 4(4): 58.
- Arokiasamy and Tat, H. (2020). Exploring the influence of transformational leadership on work engagement and workplace spirituality of academic employees in the private higher education institutions in Malaysia. *Management Science Letters*, 10(4): 855-64.
- Avolio, B. J. and Gardner, W. L. (2005). Transformational leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3): 315-38.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F. and May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15(6): 801-23.
- Bailey, C., Madden, A., Alfes, K. and Fletcher, L. (2017). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews*, 19(1): 31-53.
- Bakker, A. B., Albrecht, S. L. and Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1): 4-28.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P. and Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work and Stress*, 22(3): 187-200.
- Bamford, M., Wong, C. A. and Laschinger, H. (2013). The influence of transformational leadership and areas of worklife on work engagement of registered nurses. *Journal of Nursing Management*, 21(3): 529-40.
- Bednarska, M. A. (2017). Does the effect of person-environment fit on work attitudes vary with generations? insights from the tourism industry. *International Journal of Management and Economics*, 53(1): 65-83.
- Beecroft, P. C., Dorey, F. and Wenten, M. (2008). Turnover intention in new graduate nurses: a multivariate analysis. *Journal of Advanced Nursing*, 62(1): 41-52.
- Beerepoot, I., van de Weerd, I. and Reijers, H. A., 2019. "Business process improvement activities: differences in organizational size, culture, and resources." In *Paper Presented at the International Conference on Business Process Management*.
- Bharwani, S. and Jauhari, V. (2013). An exploratory study of competencies required to co-create memorable customer experiences in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 25(6): 823-43.
- Bhatnagar, J. (2012). Management of innovation: Role of psychological empowerment, work engagement and turnover intention in the Indian context. *The International Journal of Human Resource Management*, 23(5): 928-51.
- Bontis, N., Bart, C. K., Serenko, A. and Hardie, T. (2007). Organizational size and knowledge flow: a proposed theoretical link. *Journal of Intellectual Capital*.
- Bothma, F. C. and Roodt, G. (2012). Work-based identity and work engagement as potential antecedents of task performance and turnover intention: Unravelling a complex relationship. *SA Journal of Industrial Psychology*, 38(1): 27-44.
- Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, 1(1): 55-86.
- Caesens, G., Stinglhamber, F. and Marmier, V. (2016). The curvilinear effect of work engagement on employees' turnover intentions. *International Journal of Psychology*, 51(2): 150-55.
- Cammann, C., Fichman, M., Jenkins, D. and Klesh, J. (1979). *The Michigan organizational assessment questionnaire*. Unpublished manuscript. University of Michigan: Ann Arbor. 71-138.

- Carter, N. T., Guan, L., Maples, J. L., Williamson, R. L. and Miller, J. D. (2016). The downsides of extreme conscientiousness for psychological well-being: The role of obsessive compulsive tendencies. *Journal of Personality*, 84(4): 510-22.
- Chaudhary, R. and Panda, C. (2018). Transformational leadership and creativity. *International Journal of Productivity and Performance Management*, 5(1): 27-42.
- Chen, N., Zhou, M., Dong, X., Qu, J., Gong, F., Han, Y. and Wei, Y. (2020). Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *The Lancet*, 395(10223): 507-13.
- Davis, J., Batchelor, J. H. and Kreiser, P. (2019). The influence of organizational task environment and firm size on top-executive compensation contracts. *Journal of Small Business and Entrepreneurship*, 31(1): 21-42.
- de Klerk, S. and Stander, M. W. (2014). Leadership empowerment behaviour, work engagement and turnover intention: The role of psychological empowerment. *Journal of Positive Management*, 5(3): 28-45.
- De Villiers, J. R. and Stander, M. W. (2011). Psychological empowerment, work engagement and turnover intention: The role of leader relations and role clarity in a financial institution. *Journal of Psychology in Africa*, 21(3): 405-12.
- Diddams, M. and Chang, G. C. (2012). Only human: Exploring the nature of weakness in transformational leadership. *The Leadership Quarterly*, 23(3): 593-603.
- Engelbrecht, A. S., Heine, G. and Mahembe, B. (2014). The influence of ethical leadership on trust and work engagement: An exploratory study. *SA Journal of Industrial Psychology*, 40(1): 1-9.
- Fornell, C. and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1): 39-50.
- Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y. and Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, 69(8): 3192-98.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R. and Walumbwa, F. (2005). Can you see the real me? A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16(3): 343-72.
- Geiger, S. W. and Cashen, L. H. (2007). Organizational size and CEO compensation: The moderating effect of diversification in downscoping organizations. *Journal of Managerial Issues*, 6(8): 233-52.
- George, B. (2003). *Transformational leadership: Rediscovering the secrets to creating lasting value*. John Wiley and Sons.
- Giallonardo, L. M., Wong, C. A. and Iwasiw, C. L. (2010). Transformational leadership of preceptors: predictor of new graduate nurses' work engagement and job satisfaction. *Journal of Nursing Management*, 18(8): 993-1003.
- Greenstone, M., Mas, A. and Nguyen, H. L. (2020). Do credit market shocks affect the real economy? Quasi-experimental evidence from the great recession and "normal" economic times. *American Economic Journal: Economic Policy*, 12(1): 200-25.
- Gupta, M. and Shaheen, M. (2017). Impact of work engagement on turnover intention: moderation by psychological capital in India. *Business Theory and Practice*, 18(3): 136-43.
- Gutermann, D., Lehmann-Willenbrock, N., Boer, D., Born, M. and Voelpel, S. C. (2017). How leaders affect followers' work engagement and performance: Integrating leader-member exchange and crossover theory. *British Journal of Management*, 28(2): 299-314.
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L. and Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2): 107-23.
- Hayes, A. F. and Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter? *Psychological Science*, 24(10): 1918-27.
- Hsieh, C. C. and Wang, D. S. (2015). Does supervisor-perceived transformational leadership influence employee work engagement through employee-perceived transformational leadership and employee trust? *The International Journal of Human Resource Management*, 26(18): 2329-48.
- Huynh, J. Y., Xanthopoulou, D. and Winefield, A. H. (2014). The job demands-resources model in emergency service volunteers: Examining the mediating roles of exhaustion, work engagement and organizational connectedness. *Work and Stress*, 28(3): 305-22.
- Ilies, R., Morgeson, F. P. and Nahrgang, J. D. (2005). Transformational leadership and eudaemonic well-being: Understanding leader-follower outcomes. *The Leadership Quarterly*, 16(3): 373-94.
- Jensen, S. M. and Luthans, F. (2006). Relationship between entrepreneurs' psychological capital and their transformational leadership. *Journal of Managerial Issues*, 9(1): 254-73.
- Karatepe, O. M. and Ngeche, R. N. (2012). Does job embeddedness mediate the effect of work engagement on job outcomes? A study of hotel employees in Cameroon. *Journal of Hospitality Marketing and Management*, 21(4): 440-61.
- Khan, R., Rehman, A. U. and Fatima, A. (2009). Transformational leadership and organizational innovation: Moderated by organizational size. *African Journal of Business Management*, 3(11): 678-84.
- Kiersch, C. and Peters, J. (2017). Leadership from the inside out: Student leadership development within transformational leadership and servant leadership frameworks. *Journal of Leadership Education*, 21(6): 16-31.
- Klatzky, S. R. (1970). Relationship of organizational size to complexity and coordination. *Administrative Science Quarterly*, 2(5): 428-38.
- Klenke, K. (2007). Transformational leadership: A self, leader, and spiritual identity perspective. *International Journal of Leadership Studies*, 3(1): 68-97.

- Kline, T. J. (2005). *Psychological testing: A practical approach to design and evaluation*. Sage Publications.
- Koene, B. A., Vogelaar, A. L. and Soeters, J. L. (2002). Leadership effects on organizational climate and financial performance: Local leadership effect in chain organizations. *The Leadership Quarterly*, 13(3): 193-215.
- Kulophas, D., Ruengtrakul, A. and Wongwanich, S. (2015). The relationships among transformational leadership, teachers' work engagement, academic optimism and school size as moderator: A conceptual model. *Procedia-Social and Behavioral Sciences*, 191(1): 2554-58.
- Laschinger, H. K. S. (2012). Job and career satisfaction and turnover intentions of newly graduated nurses. *Journal of Nursing Management*, 20(4): 472-84.
- Lee, G. and Xia, W. (2006). Organizational size and IT innovation adoption: A meta-analysis. *Information and Management*, 43(8): 975-85.
- Leroy, H., Anseel, F., Gardner, W. L. and Sels, L. (2015). Transformational leadership, authentic followership, basic need satisfaction, and work role performance: A cross-level study. *Journal of Management*, 41(6): 1677-97.
- Li, D., Wu, Y., Liu, C., Zhang, G. and Arıcı, M. (2018). Energy investigation of glazed windows containing Nano-PCM in different seasons. *Energy Conversion and Management*, 172(2): 119-28.
- Lin, Y. K., Lee, W. C., Kuo, L. C., Cheng, Y. C., Lin, C. J., Lin, H. L. and Lin, T. Y. (2013). Building an ethical environment improves patient privacy and satisfaction in the crowded emergency department: a quasi-experimental study. *BMC Medical Ethics*, 14(1): 8.
- Liu, W., Zhao, S., Shi, L., Zhang, Z., Liu, X., Li, L. and Jia, X. (2018). Workplace violence, job satisfaction, burnout, perceived organisational support and their effects on turnover intention among Chinese nurses in tertiary hospitals: a cross-sectional study. *BMJ Open*, 8(6): 44-62.
- Locke, E. A. (1970). Job satisfaction and job performance: A theoretical analysis. *Organizational Behavior and Human Performance*, 5(5): 484-500.
- Luu, T. T. (2020). Linking transformational leadership to salespeople's service performance: The roles of job crafting and human resource flexibility. *Industrial Marketing Management*, 84(4): 89-104.
- Lux, A. A., Grover, S. L. and Teo, S. T. (2019). Reframing commitment in transformational leadership: Untangling relationship–outcome processes. *Journal of Management and Organization*, 1(3): 1-19.
- Mabert, V. A., Soni, A. and Venkataramanan, M. A. (2003). The impact of organization size on enterprise resource planning (ERP) implementations in the US manufacturing sector. *Omega*, 31(3): 235-46.
- Mañas-Rodríguez, M. A., Enciso-Forero, E., Salvador-Ferrer, C. M., Trigueros, R. and Aguilar-Parra, J. M. (2020). Empirical research in colombian services sector: Relation between transformational leadership, climate and commitment. *Sustainability*, 12(16): 6659.
- McGehee, N. G., Knollenberg, W. and Komorowski, A. (2015). The central role of leadership in rural tourism development: A theoretical framework and case studies. *Journal of Sustainable Tourism*, 23(8-9): 1277-97.
- McKendrick, D. G. and Wade, J. B. (2010). Frequent incremental change, organizational size, and mortality in high-technology competition. *Industrial and Corporate Change*, 19(3): 613-39.
- Minh-Duc, L. and Huu-Lam, N. (2019). Transformational leadership, Customer citizenship behavior, Employee intrinsic motivation, and employee creativity. *Journal of Asian Business and Economic Studies*, 3(1): 40-55.
- Mitonga-Monga, J. (2019). Fostering employee commitment through work engagement: The moderating effect of job satisfaction in a developing-country setting. *Journal of Psychology in Africa*, 29(6): 546-55.
- Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology*, 62(2): 237.
- Montague, A. (2013). Vocational and skill shortages in V ietnamese manufacturing and service sectors, and some plausible solutions. *Asia Pacific Journal of Human Resources*, 51(2): 208-27.
- Nguyena, T., Phamb, T., Than, T., Tran, T. and Nguyen, T. (2020). The role of corporate social responsibilities in tourism and hospitality: The case of Vietnam. *Management Science Letters*, 10(9): 2089-98.
- Park, J. and Gursoy, D. (2012). Generation effects on work engagement among US hotel employees. *International Journal of Hospitality Management*, 31(4): 1195-202.
- Peus, C., Wesche, J. S., Streicher, B., Braun, S. and Frey, D. (2012). Transformational leadership: An empirical test of its antecedents, consequences, and mediating mechanisms. *Journal of Business Ethics*, 107(3): 331-48.
- Podsakoff, N. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 885(879): 10.1037.
- Preacher, K. J. and Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures*, 6(2): 77-98.
- Ranger-Moore, J. (1997). Bigger may be better, but is older wiser? Organizational age and size in the New York life insurance industry. *American Sociological Review*, 9(3): 1-20.
- Rasoolimanesh, S. M. and Ali, F. (2018). Partial least squares-structural equation modeling in hospitality and tourism. *Journal of Hospitality and Tourism Technology*, 9(3): 238-48.
- Real, J. C., Roldán, J. L. and Leal, A. (2014). From entrepreneurial orientation and learning orientation to business performance: analysing the mediating role of organizational learning and the moderating effects of organizational size. *British Journal of Management*, 25(2): 186-208.
- Rego, A., Sousa, F., Marques, C. and e Cunha, M. P. (2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65(3): 429-37.
- Schaufeli, W. B., Salanova, M., González-Romá, V. and Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1): 71-92.
- Schreck, P. and Raithel, S. (2018). Corporate social performance, firm size, and organizational visibility: Distinct and joint effects on voluntary sustainability reporting. *Business and Society*, 57(4): 742-78.

- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A. and King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6): 323-38.
- Singh, J. K. and Jain, M. (2013). A study of employees' job satisfaction and its impact on their performance. *Journal of Indian Research*, 1(4): 22-43.
- Tak, J., Seo, J. and Roh, T. (2019). The influence of transformational leadership on authentic followership, positive psychological capital, and project performance: Testing for the mediation effects. *Sustainability*, 11(21): 6028.
- Timms, C., Brough, P., O'Driscoll, M., Kalliath, T., Siu, O. L., Sit, C. and Lo, D. (2015). Flexible work arrangements, work engagement, turnover intentions and psychological health. *Asia Pacific Journal of Human Resources*, 53(1): 83-103.
- Tohidi, H. (2011). Teamwork productivity & effectiveness in an organization base on rewards, leadership, training, goals, wage, size, motivation, measurement and information technology. *Procedia Computer Science*, 3(2): 11-31.
- Vaccaro, I. G., Jansen, J. J., Van Den Bosch, F. A. and Volberda, H. W. (2012). Management innovation and leadership: The moderating role of organizational size. *Journal of Management Studies*, 49(1): 28-51.
- Vogelgesang, G. R., Leroy, H. and Avolio, B. J. (2013). The mediating effects of leader integrity with transparency in communication and work engagement/performance. *The Leadership Quarterly*, 24(3): 405-13.
- Wadhwa, T. and Bano, S. (2020). The role of workplace spirituality and emotional stability in occupational stress among college teachers. *IUP Journal of Organizational Behavior*, 19(3): 221-40.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S. and Peterson, S. J. (2008). Transformational leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1): 89-126.
- Wang, D. S. and Hsieh, C. C. (2013). The effect of transformational leadership on employee trust and employee engagement. *Social Behavior and Personality: An International Journal*, 41(4): 613-24.
- Wu, A., Liu, L., Huang, T. and Zeng, Z. (2017). Mittag-Leffler stability of fractional-order neural networks in the presence of generalized piecewise constant arguments. *Neural Networks*, 85(5): 118-27.
- Zenger, T. R. and Lawrence, B. S. (1989). Organizational demography: The differential effects of age and tenure distributions on technical communication. *Academy of Management Journal*, 32(2): 353-76.
- Zhao, L. and Zhao, J. (2017). A framework of research and practice: Relationship between work engagement, affective commitment, and turnover intentions. *Open Journal of Social Sciences*, 5(10): 225-33.
- Zhu, W., Avolio, B. J. and Walumbwa, F. O. (2009). Moderating role of follower characteristics with transformational leadership and follower work engagement. *Group and Organization Management*, 34(5): 590-619.