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## Article

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## MANAGEMENT | RESEARCH ARTICLE

# How financial and non-financial rewards moderate the relationships between transformational leadership, job satisfaction, and job performance

Hsinkuang Chi<sup>1</sup>, Thinh-Van Vu<sup>2\*</sup>, Hoang Viet Nguyen<sup>3</sup> and Thanh Ha Truong<sup>1</sup>

**Abstract:** While extensive literature is available on the relationships between transformational leadership, job satisfaction, rewards, and job performance, few studies examine the moderating roles of financial and non-financial rewards on these relationships. This study examines the moderating effects of financial and non-financial rewards on transformational leadership–job performance and job satisfaction–job performance relationships. It also examines the mediating effect of job satisfaction on transformational leadership and job performance. The data were obtained through questionnaires that were distributed to employees (N = 331) of private enterprises in Vietnam. The study uses the SPSS 23.0 software and the PROCESS V3.4 to test the hypotheses. The results demonstrate that transformational leadership significantly affects job satisfaction, which, in turn, is strongly associated with job performance. Job satisfaction also has a mediating effect on the relationship between transformational leadership and job performance. Interestingly, neither financial nor non-financial rewards have any moderating effect on the relationship between job satisfaction and job performance, but financial rewards have a negative moderating effect on the relationship between transformational leadership and job performance. These findings suggest that managers may benefit from combining transformational leadership with financial rewards to motivate employees and improve job performance.

**Subjects:** Business, Management and Accounting; Leadership; Human Resource Management

**Keywords:** transformational leadership; job satisfaction; financial reward; non-financial reward; job performance

## 1. Introduction

Organizational managers continually look for ways to increase the job satisfaction, job performance, and productivity of their employees to improve their organization's competitive advantage. Employee motivation and job performance are key to improving organizational performance in every organization (Bashir et al., 2020; Khalid, 2020). Previous studies have shown that job performance is particularly influenced by transformational leadership, job satisfaction, and rewards (Bowling et al., 2015; Al Harbi et al., 2019). The correlations between transformational leadership, job satisfaction, and job performance reflect reciprocal exchange, as characterized by the theories of social exchange and organizational support (Jyoti & Bhau, 2015). According to the social exchange theory, as individuals receive support and assistance from others, they feel

obliged to help in return (Blau, 2017). The organizational support theory, which is based on the social exchange theory, proposes that subordinate employees develop positive attitudes and behaviors as they perceive support from their leaders in the organization (Eisenberger et al., 2014). Transformational leadership has been shown to be positively correlated with lower turnover and improvements in the job-related attitudes, employee commitment, trust, and job performance to develop themselves and achieve their goals (Avolio et al., 1999; Choi et al., 2016; Northouse, 2019). Transformational leaders stimulate subordinate employees through inspirational motivation, intellectual stimulation, individualized consideration, and idealized influence (Bass et al., 1987; Escortell et al., 2020), which allows employees to believe in and enhances employees' job satisfaction and job performance. Moreover, this topic has received significant attention in both research and practice because the development of human resource management in Vietnam is a remarkable example of developed countries spreading their conceptual knowledge and human resource management theories to developing Asian countries (Cooke, 2018). However, there has been no comprehensive investigation of the relationships between transformational leadership, job satisfaction, rewards, and job performance in the Vietnamese context. Previous work has instead focused on single constructs or the relationship between pairs of constructs, such as that of leadership style and job performance (Khuong & Quoc, 2016), leadership style and job satisfaction (Duong, 2013), reward and job performance (Stanton & Pham, 2014).

According to theories of motivation (Alderfer, 1969; Herzberg et al., 1993; Maslow, 1943; Vroom, 1964), leaders often use financial and non-financial rewards to motivate employees and improve their job performance. While some studies have suggested that rewards have a positive effect (Ngwa et al., 2019; Seng & Arumugam, 2017), however, others have found there to be no effect at all (Ajila & Abiola, 2004; Njanja et al., 2013). Moreover, the cognitive evaluation theory (Deci et al., 2017; Ryan & Deci, 2000) and the motivation crowding theory (Frey & Jegen, 2001; Titmuss, 1970) suppose that rewards could adjust the impact of transformational leadership on subordinate employees' job performance. In addition, few studies have examined how financial and non-financial rewards may moderate the relationships between job satisfaction and job performance (Judge et al., 2001; Podsakoff et al., 1996). Thus, although researchers have tried to determine the role of financial and non-financial rewards in improving job performance, findings are often contradictory, and much remains unknown concerning how it moderates the relationships between transformational leadership and job performance and between job satisfaction and job performance. These research gaps will be addressed in the Vietnamese context in this study. Therefore, the research questions of this study are: (1) what are the relationships among transformational leadership, job satisfaction, and job performance in the Vietnamese context; (2) how does job satisfaction mediate the relationship between transformational and job performance in the Vietnamese context; (3) how do financial and non-financial rewards moderate the transformational leadership-job performance and job satisfaction-job performance connections.

A major motivation for this study is to further explore the relationships among transformational leadership, job satisfaction, and job performance and the moderating roles of financial and non-financial rewards in Vietnam. First, it explores the potential connections between transformational leadership, job satisfaction, and job performance. Second, it considers the potential mediating effect of job satisfaction on the relationship between transformational leadership and job performance in the Vietnamese context. This study can further support the social exchange and motivation theories in understanding the relationships among transformational leadership, job satisfaction, and job performance in the context of developing countries. Finally and especially, this study examines the potential different moderating effects of financial and non-financial rewards on the relationship between transformational leadership, job satisfaction, and job performance. This study can contribute to enriching the application of the cognitive evaluation theory and the motivation crowding theory in explaining the moderating role of financial and non-financial rewards on the relationship between transformational leadership, job satisfaction, and job performance. By understanding these relationships and moderating influences in a developing country

context like Vietnam, researchers and practitioners can develop guidance that organizations may use to motivate employees and improve their job performance.

## 2. Theoretical background and hypotheses development

### 2.1. Transformational leadership, job satisfaction, and job performance

Leadership is a truly interdisciplinary field of inquiry and practice that draws on concepts from management, psychology, sociology, political science, and education (Goethals et al., 2004; Gumah et al., 2021). In organizational research, leadership has been defined as one person's influence over another in ways that relate to work (Holtzhausen & de Klerk, 2018; Northouse, 2019). Tannenbaum et al. (1961, p. 24) defined leadership as "the interpersonal influence exercised in situations and directed, through the communication process, toward the attainment of a specified goal or goals." Leadership effectiveness is measured by goal achievement (or non-achievement) and by subordinate employees' satisfaction in attaining their goals. A recurring aspect of existing definitions of leadership is the significance of the subordinate employees' perception and recognition of their leaders' attributes (Goethals et al., 2004).

Transformational leadership has been argued to be one of the most effective leadership styles, and it has been the subject of a significant amount of study (B.M. Bass & Riggio, 2014; Northouse, 2019; Nurjanah et al., 2020). According to B.M. Bass and Riggio (2014), leaders with a transformational leadership style encourage and stimulate their subordinate employees to achieve extraordinary results and, in doing so, increase their own leadership capacity. B. M. Bass and Avolio (1994) and Avolio et al. (1999) proposed that transformational leadership comprises four components, namely intellectual stimulation (the degree to which a leader seeks employees' views on issues and considers a range of opinions before making decisions), inspirational motivation (the degree to which a leader is able to motivate subordinate employees by clearly expressing his or her vision through words, signs, symbols, and imagery), individualized consideration (the degree to which a leader pays attention to each subordinate employee's needs and desires, acts as a counselor, and provides instruction), and idealized influence (the degree to which a leader acquires admiration and trust by exhibiting a charismatic style that reflects a high level of ethics).

Employee job performance is among the most important concerns for a manager because it can increase an organization's overall performance, both directly and indirectly. Viswesvaran and Ones (2000, p. 216) defined job performance as the "scalable actions, behaviors, and outcomes that employees engage in or bring about that is linked with and contribute to organizational goals." Given that job performance is determined by an employee's positive contributions to the organization's productivity, it has been described as a multi-dimensional concept involving individual behaviors, achievements, and job requirements (Chu & Lai, 2011; Vo-Thanh et al., 2020). Van Scotter et al. (2000) divided job performance into two dimensions, namely task performance and contextual performance. Task performance relates to the production of goods, services, or actions that indirectly assist with core organizational transformation and maintenance. Contextual performance relates to individual efforts to shape the organizational, psychological, and social contexts that act as catalysts for tasks, activities, and processes (Chu & Lai, 2011; Jyoti & Bhau, 2015). Recent work has argued for two additional dimensions, namely adaptive performance (the ability of an employee to change his or her behavior to meet environmental or situational requirements) and counterproductive performance (non-task behavior that injures the organization; Pulakos et al., 2000). This study used task performance and contextual performance to measure job performance because they are correlated with rewards (Van Scotter et al., 2000) and can, therefore, provide insight into the moderating effect of rewards on the relationships between transformational leadership, job satisfaction, and job performance.

Transformational leadership positively affects job performance as the principle of social exchange theory and organizational support theory. According to the social exchange theory, individuals that receive support and assistance from others feel obliged to help in return (Blau,

2017). The organizational support theory, based on the social exchange theory, posits that employees develop positive attitudes and behaviors when they feel supported by their organization. Eisenberger et al. (2014) indicated that perceived organizational support is part of the social exchange between an employee and a supervisor, who may be seen as representing the organization. Considering that transformational leaders may be perceived as particularly supportive, transformational leadership can influence employees' job performance (Al Harbi et al., 2019). Transformational leaders provide their employees with constructive feedback, persuade them to make more of an effort, and inspire them to think creatively about complex issues, and therefore enhance their job performance (B. M. Bass & Avolio, 1994). In addition, transformational leaders increase their subordinate employees' motivation and commitment by helping them to perform beyond their own expectations (Al Harbi et al., 2019). Furthermore, transformational leaders create organizational values and goals, and they support their employees' efforts to achieve these goals (Lai et al., 2020; Podsakoff et al., 1996). This makes employees more willing to collaborate and has a positive effect on contextual performance. Herman and Chiu (2014) also indicated that by establishing a relationship between and among leaders and subordinate employees, transformational leaders are more likely to improve their employees' task performance and organizational citizenship behavior. Thus:

**Hypothesis 1 (H1):** Transformational leadership has a significant positive effect on job performance.

Many previous studies have considered job satisfaction, which reflects factors including the emotions, feelings, and attitudes of employees (Buil et al., 2019; Bushra et al., 2011; Cranny & Cain Smith, 1992; Judge et al., 2001). Hoppock (1935) proposed that job satisfaction is indicative of individuals' honest feelings toward their psychological, physiological, and environmental conditions. Job satisfaction can be divided into intrinsic and extrinsic aspects (Spector, 1997), where intrinsic job satisfaction concerns an individual's feelings about the nature of his or her job duties, while extrinsic job satisfaction concerns an individual's feelings about the working conditions external to these duties. High job satisfaction is associated with subjective well-being, organizational commitment, work engagement, and organizational citizenship behavior, while low job satisfaction is associated with depression, anxiety, burnout, intent to leave, actual turnover, increased absence, and counterproductive work behaviors (Chi et al., 2016; Judge et al., 2001; Locke, 1976).

According to the theories of motivation (Alderfer, 1969; Herzberg et al., 1993; Vroom, 1964), when subordinate employees receive the support and guidance of their transformational leaders, they could feel appreciated by the organization and satisfied with their job in the organization. Choi et al. (2016) and Northouse (2019) have presented evidence that transformational leadership can enhance employees' job satisfaction and organizational commitment. Jyoti and Bhau (2015) and Nurjanah et al. (2020) also demonstrated that transformational leaders might serve as antecedents to employees' motivation and positive attitudes since the transformational leader can encourage and satisfy their subordinates with their helpful, friendly nature. Bogler (2001) suggested that the impact of transformational leadership on job satisfaction is the result of employees' perceptions of transformational leadership behaviors, such as providing individual attention, empowerment, inspiration, and intellectual stimulation. Transformational leadership has also been observed to have a positive effect on job satisfaction in the specific contexts of the banking sector in Pakistan (Bushra et al., 2011) and the healthcare sector in Malaysia (Choi et al., 2016). On the basis of this theory and previous studies, this study makes the following hypothesis:

**Hypothesis 2 (H2):** Transformational leadership has a significant positive effect on job satisfaction.



The relationship between job satisfaction and job performance has also been examined in many previous studies and is one of the most popular research traditions in industrial-organizational psychology (Bowling et al., 2015; Judge et al., 2001). Several models of the correlation between job satisfaction and job performance have been proposed. The longest-standing of these models suggests that job satisfaction has a causal influence on job performance (Judge et al., 2001). This model assumes that improved performance is the natural product of satisfying employees' needs. It reflects the idea that organizations that make their employees feel happy will have more productive employees (Roberts & David, 2020). This model is also based on the reciprocity principle of social exchange theory. While a number of studies, however, have argued that job satisfaction has a significant association with job performance (Bowling et al., 2015; Edwards et al., 2008; Judge et al., 2001), other studies have argued that there is not a significant correlation between the two (Keaveney & Nelson, 1993; Michelle & Muchinsky, 1985; Shaikh et al., 2012). This study, therefore, explores the impacts of job satisfaction and job performance, advancing the ongoing debates on this effect in the context of developing countries.

Additional work has also taken transformational leadership into account, proposing that it can improve job performance by increasing job satisfaction (Buil et al., 2019; Northouse, 2019). Many previous studies have found that transformational leadership leads to job satisfaction, and other studies demonstrated that job satisfaction leads to job performance. However, few studies have tested the mediating role of job satisfaction in the relationship between transformational leadership and employee performance (Al-edenat, 2018). This research will examine the impact of job satisfaction on job performance in greater detail by considering how job satisfaction may play a mediating role in the relationship between transformational leadership and job performance. The study makes the following hypotheses:

**Hypothesis 3 (H3):** Job satisfaction has a significant positive effect on job performance.

**Hypothesis 4 (H4):** Job satisfaction has a mediating effect between transformational leadership and job performance.

## **2.2. Moderating role of financial and non-financial rewards**

Rewards have been identified as essential for improving employee job performance and productivity. Employees are more willing to try their best when they believe they will receive rewards (Aktar et al., 2012). The theories of motivation propose that leaders often use encouragement as a reward to motivate employees and improve their productivity and job performance (Alderfer, 1969; Herzberg et al., 1993; Vroom, 1964). Herzberg et al. (1993) distinguished between intrinsic and extrinsic rewards, where intrinsic rewards occur naturally as part of a job (i.e., an individual experiences a successful outcome by completing a duty or attaining a target) while extrinsic rewards are external to the job itself (Malik et al., 2015). Armstrong and Murlis (2007) and Chiang and Birtch (2012) instead distinguished between financial rewards and non-financial rewards. Financial rewards are monetary and economic gains that employees get in the workplace, such as bonuses, commissions, profit sharing, allowances like housing, medical, transport, entertainment, hazards, welfare, pension and gratuities of employees, etc. Non-financial rewards are non-monetary gains in the workplace such as recognition, appreciation, involvement in decision-making, awards, opportunities for career development, on-job training, job security, study leave and sponsorship, etc. (Armstrong & Murlis, 2007; Chiang & Birtch, 2012; Lussier, 2019).

Although many studies have shown that rewards have a positive effect on job performance (Ngwa et al., 2019; Seng & Arumugam, 2017), other studies have had different results. For instance, Bishop (1987) suggested that rewards do not clearly relate to job performance because of the enterprise's specificity of discrepancies between how job performance is determined in different enterprises. Ajila & Abiola (2004) found that while there was a significant correlation between job performance and extrinsic rewards, there was no comparable correlation with intrinsic rewards. Njanja et al. (2013) also demonstrated that cash bonuses have no effect on employee

performance. These contradictory results on the relationship between rewards and job performance justify the necessity to further investigate this relationship in the new context.

In addition, rewards may interact not only with job performance but also with the relationships between transformational leadership and job performance, and between job satisfaction and job performance. Goethals et al. (2004) argued that rewards play a central role in the social exchange approach to leadership. Transformational leaders inspire their subordinate employees to perform at a high level, reinforcing the effect of rewards (Podsakoff et al., 1996; Weiß & Süß, 2016). The relationship between leaders and employees “depends upon the level of trust, interaction, support, and rewards, which determines the quality of the relationship” (Jyoti & Bhau, 2015, p. 2). Unlike transactional leaders, transformational leaders do not focus on rewards and punishments to achieve goals or reject rewards for lack of productivity; they encourage and stimulate subordinate employees to achieve extraordinary results (B.M. Bass & Riggio, 2014). Therefore, transformational leadership may interact with two kinds of rewards (financial rewards and non-financial rewards) and impact employees’ job performance.

According to the cognitive evaluation theory, one of the six mini-theories of self-determination theory, rewards could adjust individuals’ perceptions of the locus of causality, so lowering their feelings of autonomy and influencing both their extrinsic and intrinsic motivations (Deci et al., 2017; Ryan & Deci, 2000). Because transformational leaders can create employees’ sense of autonomy, job motivation, and job performance (Al Harbi et al., 2019; B. M. Bass & Avolio, 1994), rewards could moderate the effect of transformational leaders on their subordinate employees’ job motivation and job performance.

Additionally, according to the motivation crowding theory, under certain circumstances, rewards, and in particular financial (external) rewards, can crowd out or undermine an individual’s intrinsic motivation (Frey & Jegen, 2001; Titmuss, 1970). According to Van der Kolk et al. (2019), the phrase “motivation crowding out” stems from the field of economics, where it is employed to describe how rewards can make individuals’ behavior worse. Given that transformational leadership emphasizes creating subordinate employees’ intrinsic motivation through non-monetary benefits (such as acknowledgement, recognition, appreciation, awards, and opportunities for career development), financial rewards may interact with transformational leadership to change subordinate employees’ job motivation, leading to a change in their job performance. Andersen et al. (2018) supposed that if it is true that verbal rewards are typically viewed as less controlling than tangible rewards, cognitive evaluation theory and motivation crowding theory have comparable predictions: workers with leaders who use verbal contingent rewards to a larger extent will experience less control and have higher intrinsic motivation than other individuals. Wilke et al. (2000) also revealed that strong social rewards and low task rewards moderated suckers’ perceptions of injustice in the workplace. Therefore, financial and non-financial rewards can be moderators in the relationship between transformational leadership and job performance.

Moreover, according to Judge et al. (2001), rewards are one of the moderators of the relationship between job satisfaction and job performance. Podsakoff and Williams (1986) found that the relationship between job satisfaction and job performance was somewhat stronger when rewards were linked to job performance versus when there was no performance-reward contingency. This study makes the following hypotheses:

**Hypothesis 5a (H5a):** Financial rewards have moderating effects on the relationship between transformational leadership and job performance.

**Hypothesis 5b (H5b):** Non-financial rewards have moderating effects on the relationship between transformational leadership and job performance.

**Hypothesis 6a (H6a):** Financial rewards have moderating effects on the relationship between job satisfaction and job performance.



**Hypothesis 6b (H6b):** Non-financial rewards have moderating effects on the relationship between job satisfaction and job performance.

Based on all of the hypotheses given above, the research framework shown in Figure 1 was developed for use in this study:

### 3. Research methodology

#### 3.1. Sample

The data used in this study were collected from full-time employees working in private companies in the Vietnamese service sector. Vietnam's private sector, which employs over 85% of the total workforce, is regarded as the key to Vietnam's future economic success by virtue of its rapid growth and contribution to the economy (Su & Bui, 2017). Personal connections were used to identify and contact participants, who were sent the online survey questionnaire via email. The survey was designed in English, and all questions were subsequently translated into Vietnamese. Back translation was used to ensure equivalency between the two languages. A total of 400 questionnaires were distributed, and 331 usable questionnaires were received, resulting in a response rate of 82.75%.

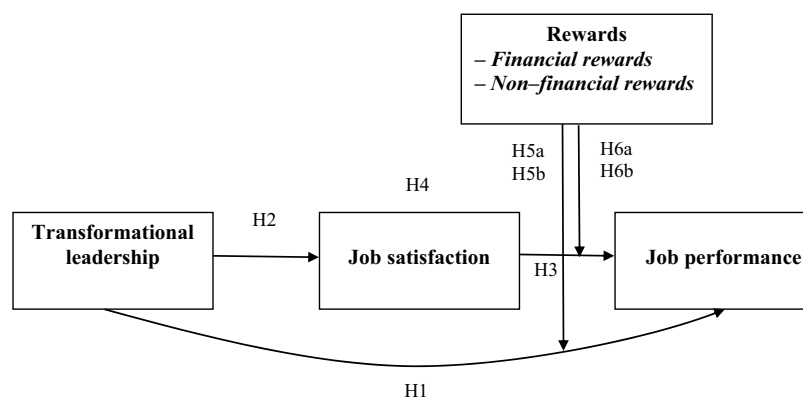
#### 3.2. Measurement scales

Scales with determined reliability and validity were used to operationalize the study's variables. All items were rated on a seven-point Likert scale that ranged from 1, "strongly disagree" to 7, "strongly agree."

Transformational leadership was measured using the Multifactor Leadership Questionnaire (Avolio et al., 1999), which includes three items for each of the four components of transformational leadership, namely intellectual stimulation (e.g., "My supervisor stimulates me to solve problems by myself."), inspirational motivation (e.g., "My supervisor helps me to understand his or her visions by using tools such as images, stories, and models."), individualized consideration (e.g., "My supervisor recognizes and appreciates that I have different skills, needs, and abilities."), and idealized influence (e.g., "My supervisor creates the feeling that we are working on an important assignment.").

Financial and non-financial rewards were measured independently of each other. Financial rewards were measured using a six-item scale that used the items adopted by Chiang and Birtch (2012), e.g., "I get a bonus when I do a good job." Non-financial rewards were measured on a seven-item scale that was based on the items used in Chiang and Birtch's (2012) study, e.g., "I get a certificate of commendation when I do a good job."

**Figure 1. Research framework.**



To measure job satisfaction, six items were designed based on the study of Chi et al. (2016). A sample questionnaire item is “I love what I am doing at work.”

Job performance was measured in terms of both task performance and contextual performance, using an eleven-item scale that was based on items from Chu and Lai (2011) and Jyoti and Bhau (2015). A sample item for task performance is “I fulfill my job responsibilities,” and a sample item for contextual performance is “I volunteer to carry out tasks that are not formally part of my job.”

### 3.3. Demographic characteristics

The respondent group was 41.99% male and 58.01% female. Respondents were from different age groups: 35% were less than 25 years old, 36.6% were 26–35 years old, 21.45% were 36–45 years old, and 6.95% were more than 45 years old. Respondents also had different levels of work experience: 26.29% had less than one year of work experience, 36.85% had between one and three years, 9.97% had between three and seven years, and 26.89% had more than seven years. Regarding educational level, 11.18% of the respondents were completed high school or below, while 68.79% had completed undergraduate degrees, and 19.03% had earned postgraduate degrees. Regarding the type of work contract, 37.16% had an indefinite labor contract, 31.72% had a definite-term labor contract of more than three years, 27.49 % had a definite-term labor contract of between 1 and 3 years, 3.63% had a definite-term labor contract of less than one year.

## 4. Results

### 4.1. Measurement model

Prior to testing the hypotheses, a series of confirmatory factor analyses (CFA) is conducted to examine convergent, composite reliability, and discriminant validity. Table 1 shows that all items loaded as theoretically expected, and the Cronbach’s alpha coefficients ( $\alpha$ ) of the scales for all measures, ranging from 0.829 to 0.899, are greater than 0.7, supporting the reliability of the measures. The Average Variance Extracted (AVE) values of the constructs, ranging from 0.500 to 0.669, are equal to or higher than the 0.50 benchmark, supporting the convergent validity of the measures (Hair et al., 2009). Moreover, the Composite Reliability (CR) values of the main constructs are from 0.874 to 0.916, showing that the measurements are reliable.

To check discriminant validity, this study examines the structure of the data by five-factor and one-factor designed models. The results depicts that the goodness of fit of five-factor model ( $\chi^2 = 688.70$ ,  $df = 437$ ,  $p = .000$ ,  $\chi^2/df = 1.57$ , root mean square error of approximation [RMSEA] = 0.04, root mean square residual [RMR] = 0.08, goodness-of-fit index [GFI] = 0.90, adjusted goodness-of-fit index [AGFI] = 0.86, confirmatory fit index [CFI] = 0.95, normed fit index [NFI] = 0.89) is better than one-factor model ( $\chi^2 = 2923.57$ ,  $df = 559$ ,  $p = .000$ ,  $\chi^2/df = 5.23$ , RMSEA = 0.11, RMR = 0.22, GFI = 0.60, AGFI = 0.54, CFI = 0.58, NFI = 0.526). This result demonstrates that the variables are distinct (Hinkin, 1995). Further discriminant validity also is conducted by comparing the square root of the construct’s AVE with the inter-construct correlations in the model. The square root of the AVE for each construct (0.707, 0.818, 0.719, 0.733, and

**Table 1. Convergent validity**

Construct	A	CR	AVE
Transformational leadership	0.899	0.916	0.500
Financial rewards	0.835	0.890	0.669
Non-financial rewards	0.842	0.881	0.517
Job satisfaction	0.829	0.874	0.538
Job performance	0.851	0.887	0.528

**Table 2. Means, Standard Deviations (SD), intercorrelations, and discriminant validity**

Construct	Mean	SD	TL	FR	NR	JS	JP
TL	5.17	1.05	(0.707)				
FR	5.42	1.21	0.282***	(0.818)			
NR	5.41	1.04	0.441***	0.473***	(0.719)		
JS	5.42	1.01	0.463***	0.281***	0.439***	(0.733)	
JP	5.55	0.91	0.520***	0.287***	0.513***	0.618***	(0.727)

Note. \*\*\*  $p < 0.001$ ; Square root of AVE in parentheses along the diagonal.

TL = Transformational leadership; FR = Financial reward; NR = Non-financial reward; JP = Job performance.

0.727) is higher than the correlations between that construct and all other constructs in the model (see, Table 2), proving the discriminant validity of the measures (Fornell & Larcker, 1981).

To check common method bias (CMB), as this study uses cross-sectional data, Harman's single-factor test proposed by Podsakoff et al. (2003) is used. The aim is to see if a single factor accounts for more than half (50%) of the variance, which might be problematic as it is an indicative presence of CMB. As its result reveal that the first factor only accounted for 26.83% of the variance, the issue of CMB was eliminated. Moreover, the variance inflation factor (VIF) values of the independent variables should be considered because they also indicate the potential multicollinearity issues (O'Brien, 2007). The inner VIF values, ranging from 1.37 to 2.36, are significantly under the cut-off value of 10, demonstrating that multicollinearity is not a serious concern.

#### 4.2. Correlation analysis

Each variable is tested for correlation using the Statistical Package for the Social Sciences (SPSS) 23.0 software, and the results are given in Table 2. There are significant positive relationships between transformational leadership and job satisfaction ( $r = 0.463$ ,  $p < 0.001$ ) and between transformational leadership and job performance ( $r = 0.520$ ,  $p < 0.001$ ). There are significant positive relationships between job satisfaction and job performance ( $r = 0.618$ ,  $p < 0.001$ ), between financial rewards and job performance ( $r = 0.282$ ,  $p < 0.001$ ), and between non-financial rewards and job performance ( $r = 0.441$ ,  $p < 0.001$ ). Therefore,  $H1$ ,  $H2$ , and  $H3$  receive preliminary support.

#### 4.3. Direct and indirect effects analysis

The study uses the methods outlined by Baron and Kenny (1986) to examine the mediating effects of each variable. Table 3 presents the results of regression analysis for each variable. Model 1 shows that transformational leadership has a significant positive influence on job performance ( $\beta = 0.520$ ,  $t = 11.032$ ,  $p < 0.001$ ), which provides support for  $H1$ . Model 2 shows that transformational leadership also has a significant positive influence on job satisfaction ( $\beta = 0.463$ ,  $t = 9.485$ ,

**Table 3. The results of regression analysis of direct effects**

Variables	JP	JS	JP	JP
	Model 1	Model 2	Model 3	Model 4
TL	0.520***	0.463***		0.297***
JS			0.618***	0.480***
R	0.520	0.463	0.618	0.671
R <sup>2</sup>	0.270	0.215	0.381	0.451
Adj.R <sup>2</sup>	0.268	0.212	0.380	0.448
F	121.709	89.960	202.897	134.651

Note. \*\*\*  $p < 0.001$ ;  $\beta$  = Standardized coefficient.

TL = Transformational leadership; JS = Job satisfaction, and JP = Job performance.

$p < 0.001$ ), which provides support for H2. Model 3 shows that job satisfaction has a significant positive influence on job performance ( $\beta = 0.618$ ,  $t = 14.244$ ,  $p < 0.001$ ), which provides support for H3.

According to H4, job satisfaction is predicted to mediate between transformational leadership and job performance. To test this hypothesis, the total effect of transformational leadership on job performance is compared with the indirect effect between them. In Model 4, job satisfaction is included in the regression analysis of transformational leadership and job performance. The results are significant ( $\beta = 0.297$ ;  $p < 0.001$ ), the results indicate that transformational leadership still has a significantly positive influence on job performance, but the coefficient value decreases from 0.520 to 0.297, which indicates that there was only a partial mediating effect. Therefore, this model provides support for H4, demonstrating that transformational leadership affects job performance by mediating the effect of job satisfaction.

Preacher and Hayes's (2004) suggestions are used to examine the indirect effects of transformational leadership on job performance. The mediating effect is authenticated by applying the Sobel test using the PROCESS macro for SPSS (Hayes, 2017). As seen in Table 4, the  $z$ -value is 6.9881, and the mediating effect value is 0.1993, indicating that there is a mediating effect. Bootstrap confidence intervals (CIs) are determined in order to verify the results of the Sobel test; 95% CI = [0.1395, 0.2531] and reach significant levels ( $p < 0.001$ ). Thus, H4 receive confirmation.

#### 4.4. Moderating effect analysis

To test the moderating effects of financial and non-financial rewards, the study follows Baron and Kenny's (1986) procedure for applying the hierarchical regression test, creating the interaction term after inserting the main impact from the interacting variables. All of the variables related to the interaction terms are centered in order to minimize multicollinearity problems (Aiken et al., 1991).

Table 5 presents the result of a hierarchical regression analysis that considers the moderating effects of financial and non-financial rewards on the relationship between transformational leadership and job performance.

Model 5 shows that financial rewards have a significant positive influence on job performance ( $\beta = 0.287$ ,  $p < 0.001$ ). Model 6 demonstrates that financial rewards have a significant negative

**Table 4. The results of the indirect effects of transformational leadership on job performance**

Direct effects and total effect			B	SE	T	p
TL → JP			0.4518	0.0410	11.0322	.0000
TL → JS			0.4485	0.0473	9.4847	.0000
JS → JP, TL is controlled			0.4311	0.0415	10.3927	.0000
TL → JP, JS is controlled			0.2585	0.0401	6.4387	.0000
Indirect effect and significance using the normal distribution						
	Value	SE	LL95CI	UL95CI	z	p
Sobel	.1933	.0277	.1391	.2476	6.9881	.0000
Bootstrap results for indirect effects						
	Data	SE	LL95CI	UL95CI	Mean	
Effect	.1933	.0290	.1395	.2531	0.1927	.0000

Note. TL = Transformational leadership; JP = Job performance; JS = Job satisfaction.

N = 331; Number of Bootstrap Resamples = 5000; LL = Lower Limit, CI = Confidence Interval; UL = Upper Limit;  $\beta$  = Unstandardized Coefficient.

moderating effect on the relationship between transformational leadership and job performance ( $\beta = -0.140$ ,  $p = 0.002$ ). Thus, financial rewards have a significant negative moderating effect on the relationship between transformational leadership and job performance. Model 7 shows that non-financial rewards also have a significant positive influence on job performance ( $\beta = 0.513$ ,  $p < 0.001$ ). However, as was shown by Model 8, the interactive effects of transformational leadership and non-financial rewards do not significantly affect job performance ( $p = 0.171$ ). As a result, *H5a* is supported, but *H5b* is not.

To better understand these results, the process given by Aiken et al. (1991) is followed, and the moderating effects for low and high financial and non-financial rewards and transformational leadership are each set as either low (1) or high (2), with the median used as a benchmark. The PROCESS V3.4 Model 17 (Hayes, 2017) is used to compute the interaction effects. Figure 2 shows that low financial rewards have a greater influence on the impact of transformational leadership on job performance than high financial rewards do. Therefore, the effect of transformational leadership on job performance is stronger at a low level of financial rewards than those at a high level of financial rewards.

Table 6 presents the result of a hierarchical regression analysis that considers the moderating effects of financial and non-financial rewards on the relationship between job satisfaction and job performance. Model 10 shows that the interactive effects of job satisfaction and financial rewards do not significantly affect job performance ( $\beta = -0.024$ ;  $p = 0.581$ ). Similarly, Model 12 illustrates that the interactive effects of job satisfaction and non-financial rewards do not significantly affect job performance ( $\beta = -0.017$ ,  $p = 0.671$ ). As a result, neither *H6a* nor *H6b* is supported.

## 4.5. Discussions and implications

### 4.5.1. Discussions

The study first examines the direct relationships between transformational leadership, job satisfaction, and job performance. The results demonstrate that transformational leadership is positively related to job performance, a result in agreement with Al Harbi et al. (2019), Lai et al. (2020), and Piccolo and Colquitt (2006). This result reinforces the theory of transformational leadership that transformational leaders stimulate subordinate employees by expressing their concern and offering incentives, which allows employees to believe in and follow their leader and which enhances their job performance (Bass et al., 1987). This study also finds that transformational leadership has a significant effect on job satisfaction, a finding that is in line with the results of

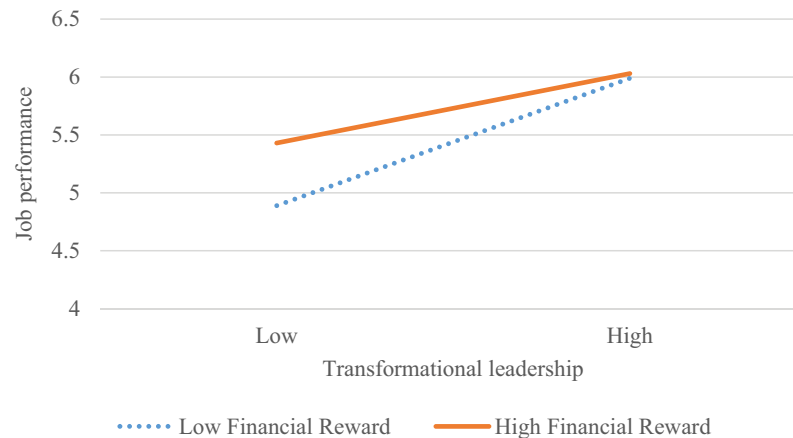
**Table 5. The results of the moderating effects of financial and non-financial rewards on the relationship between transformational leadership and job performance**

Variables	JP			
	Model 5	Model 6	Model 7	Model 8
TL		0.473***		0.365***
FR	0.287***	0.245**		
TL x FR		-0.140**		
NR			0.513***	0.343***
TL x NR				-0.61
R	0.287	0.557	0.513	0.612
R <sup>2</sup>	0.083	0.310	0.264	0.374
Adj.R <sup>2</sup>	0.080	0.304	0.261	0.368
F	29.234	48.467	117.716	65.124

Note. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ ;  $\beta$  = Standardized coefficient.

TL = Transformational leadership; FR = Financial reward; NR = Non-financial reward; JP = Job performance.

**Figure 2. Moderating effects of financial rewards on the link between transformational leadership and job performance.**



**Table 6. The results of the moderating effects of financial and non-financial rewards on the relationship between job satisfaction and job performance**

Variables	JP			
	Model 9	Model 10	Model 11	Model 12
JS		0.583***		0.486***
FR	0.287***	0.120**		
JS x FR		-0.024		
NR			0.513***	0.300***
JS x NR				-0.017
R	0.287	0.632	0.513	0.674
R2	0.083	0.399	0.264	0.454
Adj.R2	0.08	0.394	0.261	0.449
F	29.234	71.531	117.716	90.751

Note. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ ;  $\beta$  = Standardized coefficient.

JS = Job satisfaction; FR = Financial reward; NR = Non-financial reward; JP = Job performance.

Choi et al. (2016) and Bogler (2001). The results also demonstrate that job satisfaction was significantly associated with job performance, a finding that is congruent with the results of Bowling et al. (2015), Roberts and David (2020), and Judge et al. (2001) but is not in line with the results of Keaveney and Nelson (1993), Shaikh et al. (2012). This result confirms the positive impact of job satisfaction on job performance in the context of developing countries like Vietnam. The study hypothesized that job satisfaction would mediate the relationship between transformational leadership and job performance. This hypothesis is supported, and the results show that transformational leadership has not only a direct influence but also an indirect one through job satisfaction on job performance.

Interestingly, the results of the study support the hypothesis that financial rewards moderate the relationship between transformational leadership and job performance, but they do not support the hypothesis that non-financial rewards moderate this relationship. The study also finds that regardless of whether high or low non-financial rewards are offered, the relationship between transformational leadership and job performance will be unchanged. This may be because, in the context of Vietnam, transformational leaders can foster their employees' performance with their leadership capacity through inspirational motivation, intellectual stimulation, individualized consideration, and idealized influence without using more non-financial rewards.



The results of the present study also demonstrate that neither financial nor non-financial rewards have any moderating effect on the relationship between job satisfaction and job performance. Although some previous studies have found that rewards have a moderating effect on the link between job satisfaction and job performance (Judge et al., 2001; Podsakoff & Williams, 1986), this study finds no such effect. According to the expectancy theory (Vroom, 1964), employee motivation is based on valence, expectancy, and instrumentality. In this theory, valence is the significance that an individual associates with an expected outcome. Therefore, the results of the study suggest that the rewards that companies in Vietnam offer their employees do not achieve the employees' expectations or that the individual rewards are not sufficiently attractive to employees. Thus, regardless of whether high or low financial and non-financial rewards are offered, the relationship between job satisfaction and job performance will remain unchanged. It is possible that, in a situation in which the employees are already satisfied with their salary, benefits, resources, training and development opportunities, and working conditions, rewards will be perceived as non-essential variables for motivating them and enhancing their job performance. According to Maslow's (1943) hierarchy of needs, when employees' deficiency needs are fulfilled (i.e., job satisfaction), they seek to satisfy their growth needs. As a result, neither financial nor non-financial rewards have a moderating effect on the relationship between job satisfaction and job performance.

#### **4.6. Theoretical implications**

This study significantly advances the understanding of the relationships between transformational leadership, job satisfaction, and job performance and the moderating role of financial and non-financial rewards on the relationships between these variables. This study further supports the social exchange and motivation theories in understanding the relationships among transformational leadership, job satisfaction, and job performance in the context of developing countries. This study's results reveal that in the context of Vietnam, transformational leadership is positively related to job performance. Based on the social exchange theory and organizational support theory, the support, concern, and guidance that employees receive from transformational leadership result in employees repaying with high work motivation and strong job performance. This study also demonstrates that transformational leadership had a significant effect on job satisfaction. When employees believe that they are receiving support, guidance, and resources from their leaders, they are more likely to be satisfied with their jobs; in the absence of such support, they may become less satisfied. The results also confirm the positive impact of job satisfaction on job performance in the context of developing countries like Vietnam. Moreover, beyond examining the direct effects of transformational leadership on job performance, this empirical study broadens the knowledge on the mediating role of job satisfaction in the relationship between transformational leadership and job performance.

This study increases the understanding of the moderating role of financial and non-financial rewards on the relationships between transformational leadership and job performance. The results find that although both financial and non-financial rewards significantly and positively affected job performance, only financial rewards had a negative moderating effect on the relationship between transformational leadership and job performance. This could be explained in terms of the social exchange theory and the motivation theories. According to the principles of the social exchange theory (Blau, 2017), leaders can offer both financial and non-financial rewards to promote employees' motivation and job performance. Additionally, following the motivation theories like the hierarchy of needs theory (Maslow, 1943), ERG theory (Alderfer, 1969), and two-factor theory (Herzberg et al., 1993), employees believe that they want to satisfy their deficiency needs first and they feel they have done a good job when financial rewards are used as payoffs for performance.

Interestingly, however, the results show that low financial rewards have a greater influence on the effect of transformational leadership on job performance than high financial rewards do. This could be explained by the crowding-out effect of extrinsic incentives (i.e., financial rewards) on

intrinsic motivation as the principle of the motivation crowding theory. According to this theory, monetary rewards may impair intrinsic motivation, resulting in a reduction in the performance of those activities (Frey & Jegen, 2001; Titmuss, 1970). Consequently, transformational leadership is constantly accompanied by non-monetary benefits (such as acknowledgement, recognition, and appreciation), which may be drowned out or suppressed by monetary incentives, leading to a decrease in subordinates' job performance. Therefore, this study contributes to developing the literature related to applying the motivation crowding theory in the research area of leadership, human resource management, and organizational behaviors.

#### **4.7. Practical implications**

The results of this study offer several suggestions for managers that wish to increase employees' job satisfaction, job performance, and productivity in order to give their organization a competitive advantage. First, managers should combine the transformational leadership style with a strategy of financial rewards to motivate employees and encourage their job performance. Transformational leaders should concentrate on encouraging and stimulating their subordinate employees through inspirational motivation, intellectual stimulation, individualized consideration, and idealized influence, as opposed to distributing more financial rewards to employees because a focus on financial rewards may lead to decreased job performance. In order to raise employees' job satisfaction and, by extension, job performance, managers should only provide financial rewards at a sufficient level, combining these financial rewards with the elements of the transformational leadership style. This is compatible with the Vietnamese context because most Vietnamese businesses are classified as micro, small, or medium-sized enterprises and have a limited financial capacity (Khuong & Quoc, 2016). When organizations do not have strong financial resources, managers can still motivate employees by supporting them, increasing their self-expectations, and instructing them so that they can achieve better job performance. Moreover, this way also could help avoid the crowding-out effect of extrinsic incentives (i.e., financial rewards) on intrinsic motivation as the principle of the motivation crowding theory. Second, managers should determine what kinds of financial and non-financial rewards their employees expect. Because differences may exist between departments, positions, and individuals within a single company, it is essential that suitable rewards be chosen for each department, position, and even individual employee. Third, managers should regularly conduct employee satisfaction surveys through various methods to understand their needs and expectations. Given the importance of employees' job satisfaction in improving their job performance and organizational performance, organizations should determine what kinds of financial and non-financial rewards and other factors will best motivate their employees. Furthermore, managers and researchers should explore how other factors may influence job performance; doing so could provide a better understanding of human resource management and employee behaviors in the organization.

#### **5. Limitations and future research**

This study had several limitations that should be considered or resolved in future research. First, this study only used cross-sectional data; although we presented the research in a way that proactively addresses concerns with common method bias (Conway & Lance, 2010), this kind of data still could overlook the antecedent-consequent relationship between transformational leadership, job satisfaction, rewards, and job performance. Hence, future research should conduct a longitudinal analysis with three stages of survey for the independent variable, mediating and moderating variables, and dependent variables or use a mix-method to address this limitation. Second, due to some difficulties encountered during the survey period, the study used a convenience sample. Thus, the results were not representative of all employees throughout Vietnam. Future studies should use a larger and more specific sample to increase the representation of all generational groups. Third, the study focused on the perceptions of employees in the service sector. Future studies can apply this model to investigate how financial and non-financial rewards moderate the relationships between transformational leadership, job satisfaction, and job performance in other economic sectors or segments. Fourth, this study did not examine the effect

of specific types of financial and non-financial rewards on job satisfaction and job performance. Thus, future studies should test the impacts of specific type of rewards like ESOPs (a component of compensations and benefits) on these variables. Finally, this study was conducted in Vietnam, a developing country, and could be limited from a cross-national view. Therefore, further studies should be conducted in other countries whose economic, social, and cultural conditions are different in order to have comparisons between them.

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