



Leadership instills organizational effectiveness: a viewpoint on business organizations

Ikramul Hasan¹  · M. Nazmul Islam²

Received: 15 April 2021 / Accepted: 30 November 2021 / Published online: 22 February 2022
© The Author(s), under exclusive licence to Springer Nature Switzerland AG 2022

Abstract

This study explores the leadership (transformational, transactional, distributive, and servant leadership) effects on organization effectiveness. To analyze data and test the hypotheses, this research used structural equation modeling (SEM). A structured questionnaire was used to collect data from the 100 different DSE (Dhaka Stock Exchange) listed organizations in Bangladesh to do the organizational survey. Based on SEM outcome over the organizational context analyzed, this study concluded that transformational, distributive, and servant leadership significantly influenced organizational effectiveness. However, transactional leadership failed to associate with organizational effectiveness. The result of this also confirms the gender association between transactional leadership and organizational effectiveness as moderator. The findings provide novel and significant insights to the organizations to understand the leadership role to ensure their organizations' effectiveness. This study's outcome also creates an opportunity to extend further research in other countries with bigger samples to draw a general conclusion. Finally, this paper gives a plea to the practitioners and offers valuable examples of how organizations can use the leadership role to ensure organizational effectiveness.

Keywords Organizational effectiveness · Leadership approaches · Gender · Bangladesh · SEM

Introduction

With the rapid advances in technology and connectivity, the planet is becoming smaller. Even the most remote locations have reduced their time to exert influence worldwide from years to seconds (Barkema et al.2002). This pace and

✉ Ikramul Hasan
ikramul@gmail.com; ikramul@iub.edu.bd

¹ School of Business and Entrepreneurship, Independent University, Bangladesh (IUB), Dhaka, Bangladesh

² Department of Business Administration, University of Asia Pacific, Dhaka, Bangladesh

sensitivity force organizations to respond rapidly and quickly to changes in the environment, operational crises, or changing customer expectations (Daft and Armstrong, 2021). Globalization and advancing technology increase the speed at which companies in all sectors are required to deploy new products and services to remain competitive in the highly volatile and constantly changing market (Daft 2013). Therefore, organizations need to ensure organizational effectiveness to cope with the business world's uncertainty and confirm organizational survival and progress.

Researchers and practitioners around the world highlighted the importance of organizational effectiveness to ensure the progress and sustainability of the organization (Tyagi 2021; Linnenluecke and Griffiths 2010; Shen and Zhu 2011). Organizational effectiveness can be recognized as a strength-making factor for the organizations and could be noteworthy to create a competitive advantage over rivals. Contemporary literature witnessed different structural dimensions and contingency factors for ensuring organizational effectiveness (Amah 2012). Notably, some researchers believe that leadership is the most influencing factor to ensure organizational effectiveness (Douglas et al. 2021). The leader is the catalyst for organizational success and a vital element for the productivity of organizations (Benson and Blackman 2011). Leadership is associated with organizational innovation and change; align the organizational missions and goals with the employees through inspiration and motivation to ensure organizational effectiveness (Packard 2009). Diverse research works highlighted different leadership styles that enhance the organization's efficiency level in different country contexts (Tayal et al. 2021; Shiva and Suar 2012). Remarkably, the research world witnessed most of the studies concentrated on different leadership styles and organizational effectiveness published in the western context. Leadership style to ensure organizational effectiveness in the non-western organizational context, especially in Bangladesh's organization, was petite in evidence (Hasan et al. 2020b).

Moreover, this study has shed light on the moderating effect of employee gender in the relationship between transactional leadership and organizational effectiveness. In general, the attitude and behavior of men and women vary considerably. Hence, employee gender diversity needs to be scrutinized to ensure effectiveness in business organizations. Bangladesh is one of the most promising countries raising the economy in South Asia. Bangladesh's business organizations are going through enormous change processes and transformations to compete and sustain in the highly competitive business world (Islam et al. 2020b). Therefore, it would be interesting to investigate the leadership style that influences organizational effectiveness in Bangladesh. This study aims to explore the influences of leadership to enhance organizational effectiveness in Bangladeshi business organizations. However, the question that comes to the fore is which leadership approach or style is more effective for ensuring organizational effectiveness?

The researchers of this take a modest attempt to address this question and propose a unique leadership model, including transformational leadership (Islam et al. 2020a), transactional leadership (Bakari et al. 2017), distributed leadership (Harris et al. 2007), and servant leadership (Eva et al. 2019) as a leadership

construct to ensure organizational effectiveness for business organizations. Therefore, this research attempts to answer the following questions:

- Does organizational leadership (transformational, transactional, distributive, and servant) enhance organizational effectiveness?
- Does employee gender moderate the relationship between transactional leadership and organizational effectiveness?

Outcomes of this research make a new avenue for the business organizations in Bangladesh in strategy formulation and execution and highlight the concerns essential to be focused on assuring effectiveness for the organizations.

This paper is organized in the following ways. First, this paper presents the theoretical foundation, literature review, and hypothesis development of this research. Second, this paper presents the research methodology, sampling technique, data collection method, and analysis of this research. Third, the following sections of this paper will present findings, theoretical and practical implications. Finally, this paper concludes with the limitations and future direction of the research.

Theoretical foundation, literature review, and hypothesis development

Organizational effectiveness

Organizational effectiveness is a way of assessing the organization's performance (Lee and Choi 2003). Addressing effectiveness confers efficiency, productivity, and profit (Walton and Dawson 2001). Several types of research suggested that classification and dimensions of organizational effectiveness are more nuanced and complex (Hassan et al. 2021). In his study, Cameron (1986) stated that environmental aspects and strategic orientations should be considered as a factor that could impact the organizations' effectiveness. Furthermore, it is also important to note that organizational performance is assessed based on the time needed to achieve its objective (Weissenberger-Eibl and Hampel 2021; Roy and Dugal 2005). Organizations should also have a learning impact in which their value-creating capabilities improve over time (Gold et al. 2001). Therefore, organizational effectiveness applies to be specific for various stakeholders, such as owners, staff, and consumers. The objective-oriented approach to effectiveness views an organization as successful if the dominant alliances' goals are met (Biloslavo and Lombardi 2021). Therefore, confirming effectiveness in an organizational setup where knowledge and experience are shared and approved, its flow to the incumbents timely can be useful in producing competitive advantage (Islam et al. 2018).

Organizational leadership

Organizational leadership provides a means of managing others to achieve the goals (Jong and Hartog 2007). According to Packard (2009), organizational leadership is related to change and direction, connecting organizational objectives, aligning people with vision and goals, and motivating and inspiring employees. Organizational and management literature confirms this, and studies have documented leadership is a crucial factor for organizational effectiveness (Hasan et al. 2020a, b; Benson and Blackman, 2011). For example, in their research, Ozcelik et al. (2008) considered successful leadership based on cognitive tasks (e.g., preparation, scheduling, coordination, and decision-making) as leaders' habits of mobilizing employees' emotional capital may be a significant factor in evaluating performance at the organizational level. Epitropaki and Martin (2013) also focus on interpersonal communication, which is considered an essential element for organizations. Additionally, it is also assumed that active leaders can overcome the gaps, encourage workers to take charge of operations, think innovatively, and make decisions based on the team effort to solve business problems (Kovynyov et al. 2021; Karaa et al. 2013). Thus, considering leadership attributes, styles, and contingencies for organizational effectiveness, this study proposes that transformational, transactional, distributive, and servant expedite organizational effectiveness.

Transformational leadership and organizational effectiveness

Transformational leadership refers to the ability to increase creative thinking, which increases the efficiency, organizational creativity, and organizational success of an individual employee (Bosak et al. 2021; Birasnav 2014). Inspiring confidence, commitment, and respect in followers, leaders often affirm that the multidimensional leadership style enables followers to perform beyond expectations and emphasizes collective values and needs rather than followers' values and needs (Caniëls et al. 2018). Focusing on corporate priorities, transformational leaders encourage their followers to do more for the organization's sake. Rewards and praise should be promoted to produce good performance (Rafferty and Griffin 2004). According to Bass (1985), leadership behavior reflects transformative leadership, including positive motivation (communicating a compelling vision), idealized control (serving as a motivational role model), intellectual stimulus (encouraging followers to think beyond the box), and individualized concern (emphasis on the growth of followers; in van Dierendonck et al. 2014). Prior research studies have highlighted that the transformational leader increases organizational performance (Jaroliya and Gyanchandani 2021; Shiva and Suar 2012). Thus, it is proposed:

H1. Transformational leadership is positively related to organizational effectiveness.

Transactional leadership and organizational effectiveness

Fiedler first addressed transactional leadership by path-goal theory (1967). Transactional leadership refers to the model in which leaders inspire their subordinates to

follow the course of the set goals and explain the position and mission requirements by providing the incentives and punishments as necessary (Politis 2002). The transactional leadership model also defines the hierarchical position within the organization in maintaining that subordinates will adhere to the leadership's instructions and wishes (Thompson 2010). The critical difference between transformational leadership and transactional leadership is that transactional leadership does not individualize subordinate needs or concentrate on personal growth (Rukmani et al. 2010). The transactional leaders' passive nature often avoids corrective measures until goals are achieved (Aboramadan and Dahleez 2020). Hence, it might be possible to obtain leverage from the subordinates while acting in their best interests (Kuhnert and Lewis 1987). The current literature supports the transactional leader's effectiveness in increasing organizational performance (Baskoro 2021; Hamstra et al. 2011; Lowe et al. 1996). Hence, this study proposed:

H2. Transactional leadership is negatively related to organizational effectiveness.

Distributive leadership and organizational effectiveness

Gibb (1954) explained the distributive leadership model as a control mechanism within groups and includes more than one leader (Taylor et al. 2011). According to Hoch (2014), sharing leadership describes a situation in which several team members participate in leadership, marked by collective decision-making and mutual responsibility for desirable outcomes or objectives. Furthermore, emphasizing distributive leadership, Leach et al. (2021) explained that achieving the target, leadership performed by the team as a whole is better than only one appointed person. Furthermore, rather than relying on one's idea and vision, it is better to provide a collectively effective process performed by the participants in collecting skills and qualities that may be suitable. Therefore, having this organizational approach to distributive leadership may also increase organizations' possibilities to be effective (Samancioglu et al. 2020; Pitelis and Wagner 2019; Zepke 2007). Thus, this study proposed:

H3. Distributive leadership is positively related to organizational effectiveness.

Servant leadership and organizational effectiveness

The concept of servant leadership is relatively recent in the literature regarding leadership. Greenleaf presents such leadership first in his 1970 seminal essay. According to Greenleaf (1991), "the servant-leader is the first servant." The central trait of servant leadership matters on collective interest; the leaders do not exercise their power to get stuff done but build incentives for followers to help them develop and use persuasion to persuade their workers (van Dierendonck and Nuijten 2011). Spears (2002) identified ten points that define servant leadership: active listening, empathy, healing, understanding, persuasion, conceptualization, foresight, stewardship, dedication to growth, and community building. Consequently, when focusing on employees' potential, they recognize each follower's specific characteristics and desires and emphasize mission effectiveness, group stewardship, self-motivation, and future leadership skills accordingly. In addition, servant leaders employ

one-on-one contact to achieve full performance from followers to consider their talents, needs, wishes, ambitions, and potential (van Dierendonck et al. 2014). Unlike transformational leadership, servant leaders are considered more focused on the individual's needs; their involvement lies more with the individual than with the organization (Haq et al. 2021; Parolini et al. 2009). Previous research studies have emphasized the importance of servant leadership in enhancing organizational performance (Giambatista et al. 2020; Lee 2019; Bellamy 2019; Savage-Austin and Honeycutt 2011). Thus, this study hypothesizes:

H4. Servant leadership is positively related to organizational effectiveness.

Moderating effect of employee gender between transactional leadership and organizational effectiveness

Gender is classified as male and female social and biological characteristics. In management practice, gender diversity is a generally recognized demographic issue (Kanter 1997). For example, Eagly and Carli (2003) suggested that male staff are more knowledgeable, sharp, and have more logical and analytical skills than female staff. On the other hand, female employees are more appropriate than men to establish connections and sustain good relationships. More importantly, in social and cultural settings, men and women vary considerably. Men are authoritative in Asian society, and they are the major contributors to economic growth. Hence, this study highlights that it is worth investigating whether employee gender moderates the association between transactional leadership and organizational effectiveness.

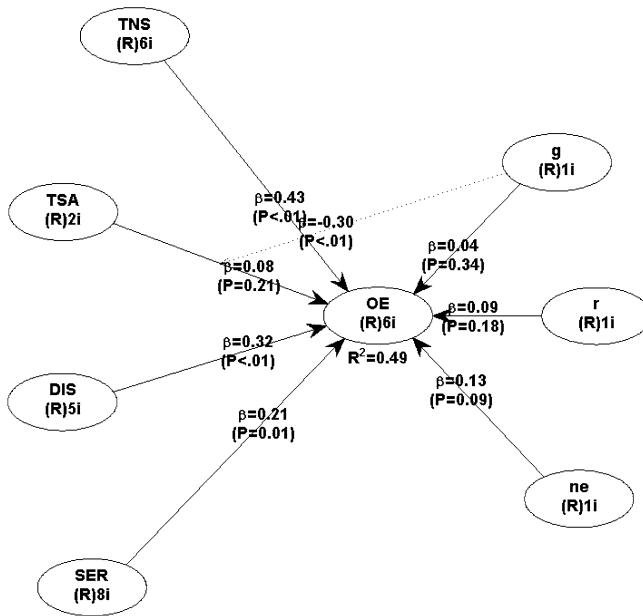
H5. Employee gender moderates the relationship between transactional leadership and organizational effectiveness.

Research model

Based on the above literature review, this study aims to develop an organizational effectiveness model, including organizational leadership (Transformational, Transactional, Distributive, and Servant) and organizational effectiveness. Figure 1 shows the research model:

Methodology

A total of 100 different Bangladesh organizations participated in this study. For this study, mostly company secretaries have been selected as respondents as they are the key decision-makers for their respective organizations. DSE (Dhaka Stock Exchange) list was used to collect the various organizations' organizational data through a structured questionnaire survey. The questionnaire comprises three parts with a measurement scale for transformational, transactional, distributive, servant leadership vis-à-vis organizational effectiveness. Questionnaire design and items of the questionnaire were adapted from previously used similar sort of studies Grant (2011); Thompson (2010); Lee and Choi (2003); Politis (2002) and Gold et al.



Notes:

TNS = Transformational leadership, TSA = Transactional leadership, DIS = Distributive leadership, SER = Servant leadership, Org = Organizational effectiveness, gen = gender, emp = Number of employees (full-time), rev = Organizational annual revenue

Fig. 1 Estimated parameters in the structural equation model

(2001). All questionnaire elements were measured on a seven-point Likert-like scale, and the hypotheses were tested using SEM.

In inferential studies, it is often argued that the use of perception variables can occur with errors in the measurement (Hasan et al. 2021; Ketkar et al. 2012). Measuring each variable based on several factors is often easier to solve the question of reducing this source of bias. This technique is known as Structural Modeling of Equations (SEM) (Kline 1998). With validity and reliability measurements to be carried out in relation to the measuring model used, the latent variable measurement decides (Hasan et al. 2020a, b; Rencher 1998). In the interests of uncertainty about latent variables, measures designed to measure one latent variable should not be used consistently with measures designed to measure other latent variables.

There are also diverse thoughts about the effect of gender, number of employees, and annual revenue on the relationship between leadership and effectiveness. Therefore, this study considers gender, the number of employees (full-time equivalent) in your organization, and annual revenue as control variables. Each variable is measured

with only one question. Questions that address gender and number of employees are related to male and female and different numbers with intervals, respectively.

Results

Sample characteristics

The respondents' profile includes position, working year's details, education, primary business, ownership status, annual revenue, number of employees, and gender. The sample profile presents that approximately 82% of the respondents hold middle management positions; 5% are top-level managers, and 13 are junior managers (13%). Among the respondents, approximately 32% of the employees had been 80, working with their current organizations more than 10 years; 29% for 2–4 years; 17% for 5–7 years; 10% for 8–10 years; and 12% for less than 2 years. In terms of educational attainment, there is a typical mix of backgrounds. In terms of education, 76% are master's level, 14% bachelor's, 9% professional degree, and only 1% Ph.D. Financial (48%) and manufacturing (42%) were the highest contributors to business activities. Most of the respondents were from wholly local-owned companies (83%), followed by wholly foreign companies (7%) and joint venture companies (10%). The number of employees in the study organizations varies: 9% of the organizations have fewer than 100 employees; 8% have between 100 and 200, 6% are staffed respectively with 201–300 and 301–400, 9% between 401 and 500, and 62% of organizations have over 500 people. This shows that all sizes of organizations (i.e., large-medium-small) were represented in the survey.

Validation and measurement model

The analysis efficiency confers through the convergent and discriminant validity tests before the SEM analysis. Likewise, this study also performs a reliability test to determine whether the answers to questions from different individuals associated with each latent variable are sufficiently correlated with each other. For the convergent validity of a measurement model, factor loadings correlated with indicators for all respective latent variables must be 0.5 or greater to be accepted for acceptance. Factor loadings (see Table 1) associated with each latent variable confirm a range from 0.659 to 0.849 in this study, which is fair to assume that the measurement model used for this research has an adequate convergent validity. Therefore, the reliability of the latent variables used in an SEM is considered appropriate if the Cronbach alpha shows above 0.50. The composite reliability coefficients are 0.7; therefore, this analysis also shows a reasonable range on both Cronbach's alpha (0.611–0.910) and composite reliability (0.837–0.927). Additionally, all variance inflation factors (VIF values) shown in Table 1 are less than 5, which indicates that the data do not contain multicollinearity (high inter-associations among latent variables).

Table 1 Convergent and discriminant validity measures

Latent variables	Loadings	R-squared	Adjusted R-squared	Composite reliability	Cronbach's alpha	Average variances extracted	Full collinearity VIFs
Organizational effectiveness							
OE1	0.747	0.495	0.451	0.897	0.861	0.593	1.334
OE2	0.837						
OE3	0.835						
OE4	0.787						
OE5	0.659						
OE6	0.741						
Transformational leadership							
TNS1	0.750			0.885	0.843	0.562	2.845
TNS3	0.757						
TNS4	0.815						
TNS5	0.762						
TNS7	0.710						
TNS6	0.700						
Transactional leadership							
TSA2	0.849			0.837	0.611	0.720	1.134
TSA3	0.849						
Distributive leadership							
DIS1	0.779			0.879	0.828	0.594	3.563
DIS2	0.783						
DIS3	0.826						
DIS5	0.716						
DIS6	0.744						

Table 1 (continued)

Latent variables	Loadings	R-squared	Adjusted R-squared	Composite reliability	Cronbach's alpha	Average variances extracted	Full collinearity VIFs
Servant leadership							
SER1	0.817			0.927	0.910	0.615	2.952
SER2	0.802						
SER3	0.814						
SER4	0.791						
SER6	0.663						
SER7	0.757						
SER8	0.820						
SER9	0.797						

Table 2 Correlations and Square roots of AVEs

	Organizational effectiveness	Transformational leadership	Transactional leadership	Distributive leadership	Servant leadership
Organizational effectiveness	0.770				
Transformational leadership	0.411	0.750			
Transactional leadership	-0.114	-0.044	0.849		
Distributive leadership	0.399	0.737	-0.025	0.771	
Servant leadership	0.270	0.696	0.128	0.766	0.784

In this study, all square roots of average variances extracted in Table 2 show acceptance of the discriminant validity of the measurement model.

The software measures three fit indices that are significant in terms of variance-based SEM (Kline 1998; Kock 2011; Ketkaret al. 2012), average path coefficient (APC), average *R*-squared (ARS), and average inflation factor of variance (VIF). Their values are as follows: APC=0.191, $P=0.012$; ARS=0.457, $P<0.001$; and AVIF=1.846. The result confirms a good model fit with the data (statistically significant APC and ARS), and low overall collinearity (AVIF < 5) (see Table 3).

The SEM analysis results are illustrated in Fig. 1. Figure 1 shows a positive and significant association between transformational leadership and Organizational Effectiveness (OE) ($\beta=0.422$, $P<0.001$). Therefore, we consider Hypothesis 1 that transformational leadership appears likely to be involved in organizational effectiveness. Hypothesis 2, transactional leadership is insignificantly related to OE ($\beta=0.080$, $P=0.207$). Distributive leadership shows a positive impact on OE (Hypothesis 3, $\beta=0.323$, $P<0.001$). Servant leadership also shows a positive and significant relationship with OE in different organizations (Hypothesis 4, $\beta=0.209$, $P=0.015$). Finally, Gender moderates the relationship between transactional leadership and organizational effectiveness (Hypothesis 4, $\beta=-0.301$, $P<0.001$). The result also explained the effect of control variables respectively for gender ($P>0.165$), number of employees (full-time equivalent) in your organization ($P>0.108$) and annual revenue ($P>0.449$). The summary is in Table 4.

Discussion and implications

To thrive in today's competitive business climate, organizations through leadership experiment with various structures and make continuous efforts to make them self-successful. Transformational leadership refers to the degree to which leadership exalts employees' ability to think innovatively, empowers followers to achieve beyond their expectations, and stresses shared values and needs rather than individual expectations. The study findings are consistent with previous studies, such as Jaroliya and Gyanchandani (2021) and Birasnav (2014). They indicate an essential

Table 3 Model fit and quality indices

Measurement	Result	Remarks
Average path coefficient (APC)	0.198	$P < 0.010$
Average R -squared (ARS)	0.540	$P < 0.001$
Average adjusted R -squared (AARS)	0.500	$P < 0.001$
Average block VIF (AVIF)	1.977	Acceptable if ≤ 5 , ideally ≤ 3.3
Average full collinearity VIF (AFVIF)	1.953	Acceptable if ≤ 5 , ideally ≤ 3.3
Tenenhaus GoF (GoF)	0.647	Small ≥ 0.1 , medium $> = 0.25$, large ≥ 0.36
Simpson's paradox ratio (SPR)	1.000	Acceptable if ≥ 0.7 , ideally = 1
R -squared contribution ratio (RSCR)	1.000	Acceptable if ≥ 0.9 , ideally = 1
Statistical suppression ratio (SSR)	1.000	Acceptable if ≥ 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)	0.875	Acceptable if ≥ 0.7

Table 4 Path coefficient and significances

Path	Beta (<i>P</i> value)	Supported or Not
Transformational leadership → Organizational effectiveness	0.42 (<0.001)	Yes
Transactional leadership → organizational effectiveness	0.08 (0.207)	No
Distributive leadership → Organizational Effectiveness	0.32 (<0.001)	Yes
Servant leadership → Organizational effectiveness	0.20 (0.015)	Yes
Transactional leadership → Gender → Organizational effectiveness	- 0.30 (<0.001)	Yes

relationship to OE. It was found that transactional leadership has an insignificant relationship with OE. The result of the study deviated findings of Aboramadan and Dahleez (2020); Hamstra et al. (2011) and put a unique emphasis on when gender moderates the relationship between transactional leadership and organizational effectiveness. Transactional leaders used to put negative emphasis on ensuring organizational effectiveness based on the management literature (Baskoro 2021). The gender association strengthens this argument since it negatively predicts the relationships and is found significant to confirm its moderating effect in increasing organizational effectiveness. The study result also confirms that distributive leaders play a significant role in organizations, as the shared and given responsibility to various teams could generate unique ideas at the highest level of the organizations (Samancioglu et al. 2020; Benson and Blackman, 2011). Likewise, servant leadership demonstrates its effect on OE. Servant leaders support the ideas that involve the individuals in organizational activities in various ways; first, leaders do not use their power to get things done but instead build incentives for their followers. Second, leaders use one-to-one interactions to understand their followers' skills, desires, aspirations, ambitions, and abilities to achieve optimal success (Giambatista et al. 2020; van Dierendonck et al. 2014). The results from the current research on the control variable effects are consistent with those (e.g., van Dierendonck et al. 2014; Birasnav, 2014; Nguyen and Mohamed, 2011), which confirmed the lack of influence of these variables in effectiveness studies.

This study's theoretical implications suggest that this research offers a unique contribution to organizational effectiveness literature by exploring the impacts of respective leadership styles, including transformational, transactional, distributive, and servant leadership, with the moderating effect of gender. Organizational leadership is considered to be an enabling factor for organizational effectiveness. Though the organizational leadership and effectiveness relationship has greater attention from the management literature, it confers very minimum initiatives in the Bangladeshi context. The empirical findings verified that the outcomes of this study unfold the knowledge of different leadership styles and contribute to the existing body of literature from the business organizations' perspective. This finding reveals that transformational leaders' positive influences help employees have greater motivation for communicating a compelling vision and encouraging followers to think beyond the box to confirm organizational effectiveness. In line with Hoch (2014) findings

of the crucial role of distributive leadership affirming organizational effectiveness, this study exhibits distributive leaders as collective decision-makers who uphold mutual responsibility for desirable outcomes or objectives. Giambatista et al. (2020) supposed that servant leadership is essential for instilling employee creativity and organizational innovation. The study result also implies that these facts show a positive relationship with organizational effectiveness. On the other hand, this research unboxes that transactional leadership is not an effective leadership style for strengthening the organizational effectiveness of business organizations in Bangladesh with gender associations.

This study also provides some insights for the practitioners of Bangladesh's business organizations. First, managers of Bangladesh's business organizations may consider transformational, transactional, distributive, and servant leadership styles to ensure organizational effectiveness. Second, top management of Bangladesh's business organization may evaluate the organizations' culture and practice a suitable leadership style among the transformational, transactional, distributive, and servant leadership styles that properly fit the organizational performance. Finally, top management of Bangladesh's business organizations may provide appropriate training for the managers to make them familiar with the required leadership styles (transformational, transactional, distributive, and servant leadership) to ensure organizational effectiveness (Yasin Ghadi et al. 2013; Islam et al. 2020b).

However, this study proposes a unique context of the business organizations in Bangladesh. The outcomes of this study also emphasize the significance of current and future business organizations taking into account leadership with gender for organizational effectiveness. As a result, business organizations can take a more tactical approach to assure effectiveness for their organizations. It is also recommended that business organizations may develop leadership to achieve greater effectiveness to confirm competitive advantage.

Conclusion

OE is essential for organizations, especially in businesses, as it allows organizations to compete against others. Therefore, business organizations should be constructive in their approach to assure effectiveness in their management processes to confirm competitive advantage. In Bangladesh, companies should put a greater focus on leadership to achieve more desirable OE outcomes. The results of this study also verify these facts and indicate the leadership importance for the organization (that is, transformational, transactional, distributive, and servant) to assure favorable OE. This study also provided a unique view of organizations operating in Bangladesh and shared scope for others to test the studied or extended models in different or similar emerging economies to generalize these facts. Based on the hypotheses tests' overall results, it can conclude that this study achieved its objectives.

Nevertheless, this research has some drawbacks, as with other studies. First, this study covers only the DSE-listed organizations in Bangladesh; therefore, the study's findings cannot be generalized. Analysis with a large number of samples may overcome this limitation with diverse groups apart from DSE to provide further

impressive results. Second, in future studies, researchers may consider other influencing factors, such as culture, structure, etc., to measure the effectiveness in Bangladesh organizations (Islam et al. 2018). Third, the studied organizations employ only leadership factors for organizational effectiveness in the Bangladesh context. So other comparisons can be added in future research, for example, information communication technology effect.

Data availability All data generated or analyzed during this study are included in this published article.

Declarations

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

- Aboramadan M, Dahleez KA (2020) Leadership styles and employees' work outcomes in nonprofit organizations: the role of work engagement. *J Manag Dev* 39(7/8):869–893. <https://doi.org/10.1108/JMD-12-2019-0499>
- Amah E (2012) Corporate culture and organizational effectiveness: a study of the nigerian banking industry. *Eur J Bus Manag* 4(8):212–228
- Bakari H, Hunjra AI, Niazi GSK (2017) How does authentic leadership influence planned organizational change? The role of employees' perceptions: integration of theory of planned behavior and lewin's three step model. *J Chang Manag* 17(2):155–187
- Barkema HG, Baum JAC, Mannix EA (2002) Management challenges in a new time. *Acad Manag J* 45(5):916–930
- Baskoro BD (2021) The nexus of transactional leadership, knowledge sharing behavior and organizational creativity: empirical evidence from construction workers in Jakarta. *J Work-Appl Manag*. <https://doi.org/10.1108/JWAM-02-2021-0020>
- Bass BM (1985) Leadership and performance beyond expectations. Lawrence Erlbaum Associates, Philadelphia
- Bellamy C (2019) Employees' perceived servant leadership and organizational commitment within an academic health science center (Doctoral dissertation, Grand Canyon University)
- Benson AM, Blackman D (2011) To distribute leadership or not? A lesson from the islands. *Tour Manag* 32:1141–1149
- Biloslavo R, Lombardi R (2021) Knowledge transferring and small and medium enterprise's (SME's) effectiveness: emerging insights and future directions. *Bus Process Manag J* 27(6):1747–1774
- Birasnav M (2014) Knowledge management and organizational performance in the service industry: the role of transformational leadership beyond the effects of transactional leadership. *J Bus Res* 67(8):1622–1629
- Bosak J, Kilroy S, Chênevert D, Flood PC (2021) Examining the role of transformational leadership and mission valence on burnout among hospital staff. *J Organ Eff* 8(2):208–227
- Cameron KS (1986) A study of organizational effectiveness and its predictors. *Manag Sci* 32(1):87–112
- Caniëls MCJ, Semeijn JH, Renders IHM (2018) Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work. *Career Dev Int* 23(1):48–66. <https://doi.org/10.1108/CDI-11-2016-0194>
- Daft RL (2013) Organization theory and design, 11th edn. South-Western Cengage Learning, Boston
- Daft RL, Armstrong A (2021) Organization theory and design, 13th edn. Nelson Education, Toronto
- De Jong JP, Hartog DND (2007) How leaders influence employees' innovative behaviour. *Eur J Innov Manag* 10(1):41–64
- Douglas S, Merritt D, Roberts R, Watkins D (2021) Systemic leadership development: impact on organizational effectiveness. *Int J Organ Anal*. <https://doi.org/10.1108/IJOA-05-2020-2184>

- Eagly AH, Carli LL (2003) The female leadership advantage: an evaluation of the evidence. *Leadersh Quart* 14(2003):807–834
- Epitropaki O, Martin R (2013) Transformational–transactional leadership and upward influence: the role of Relative Leader-Member Exchanges (RLMX) and Perceived Organizational Support (POS). *Leadersh Q* 24:299–315
- Eva N, Robin M, Sendjaya S, van Dierendonck D, Liden RC (2019) Servant leadership: a systematic review and call for future research. *Leadersh Q* 30(1):111–132
- Giambattista R, McKeage R, Brees J (2020) Cultures of servant leadership and their impact. *J Values-Based Leadersh* 13(1):12
- Gibb CA (1954) Leadership. In: Lindzey G (ed) *Handbook of social psychology*, vol 2. Addison-Wesley, Reading, MA, pp 877–917
- Gold HA, Malhotra A, Segars HA (2001) Knowledge management: an organizational capabilities perspective. *J Manag Inf Syst* 18(1):185–214
- Grant CP (2011) The relationship between distributed leadership and principal’s leadership effectiveness in North Carolina. ProQuest L.L.C., Ph.D. Dissertation, North Carolina State University. <http://repository.lib.ncsu.edu/ir/bitstream/1840.16/6673/1/etd.pdf>
- Greenleaf RK (1991) The servant as leader. The Greenleaf Center for Servant-Leadership, Indianapolis
- Hamstra MR, Van Yperen NW, Wisse B, Sassenberg K (2011) Transformational-transactional leadership styles and followers’ regulatory focus. *J Pers Psychol*. <https://doi.org/10.1027/1866-5888/a000043>
- Haq IU, Raja U, Alam I, De Clercq D, Saleem S (2021) Servant leadership and mistreatment at the workplace: mediation of trust and moderation of ethical climate. *Pers Rev*. <https://doi.org/10.1108/PR-04-2019-0172>
- Harris A, Leithwood K, Day C, Sammons P, Hopkins D (2007) Distributed leadership and organizational change: reviewing the evidence. *J Educ Change* 8(4):337–347
- Hasan I, Islam MN, Khan SR (2020a) Ready-made garment industry attractiveness: the case of Bangladesh garments’ blue-collar employees. *Int Jo Emerg Mark*. <https://doi.org/10.1108/IJOEM-03-2019-0232>
- Hasan I, Islam MN, Chowdhury MAF (2020b) Transformational human resource management: crafting organizational efficiency management. In: Ordóñez de Pablos P, Zhang X, Chui KT (eds) *Handbook of research on managerial practices and disruptive innovation in Asia*. IGI Global, USA
- Hasan I, Ahmed SP, Ahmed SU, Yousuf TB (2021) Online messaging services: a developing country perspective. *Int J Mob Commun* 19(1):75–98
- Hassan NA, Zailani S, Rahman MK (2021) Impact of integrated audit management effectiveness on business sustainability in manufacturing firms. *Manag Res Rev*. <https://doi.org/10.1108/MRR-10-2020-0658>
- Hoch JE (2014) Shared leadership, diversity, and information sharing in teams. *J Manag Psychol* 29(5):541–564
- Islam MZ, Jasimuddin SM, Hasan I (2018) Determinants that influence knowledge sharing: an integrated literature review. *Int J Knowl Manag Stud* 9(4):363–380
- Islam MN, Furuoka F, Idris A (2020a) The impact of trust in leadership on organizational transformation. *GBOE* 39(4):1–10. <https://doi.org/10.1002/joe.22001>
- Islam MN, Furuoka F, Idris A (2020b) Employee championing behavior in the context of organizational change: a proposed framework for the business organizations in Bangladesh. *J Asia Bus Stud*. <https://doi.org/10.1108/JABS-03-2020-0083>
- Jaroliya DD, Gyanchandani R (2021) Transformational leadership style: a boost or hindrance to team performance in IT sector. *Vilakshan XIMB J Manag*. <https://doi.org/10.1108/XJM-10-2020-0167>
- Kanter RM (1997) Strategies for success in the new global economy: an interview with Rosabeth Moss Kanter. *Strateg Leadersh* 25(6):20–26. <https://doi.org/10.1108/eb054603>
- Karaa D, Uysal M, Sirgyc MJ, Leed G (2013) The effects of leadership style on employee well-being in hospitality. *Int J Hosp Manag* 34:9–18
- Ketkar S, Kock N, Parente R, Verville J (2012) The impact of individualism on buyersupplier relationship norms, trust and market performance: an analysis of data from Brazil and the USA. *Int Bus Rev* 21(5):782–793
- Kline RB (1998) *Principles and practice of structural equation modeling*. Guildwood, New York
- Kock N (2011) Using WarpPLS in e-collaboration studies: descriptive statistics, settings, and key analysis results. *Int J e-Collab* 7(2):1–18
- Kovynov I, Buerck A, Mikut R (2021) Design of transformation initiatives implementing organisational agility: an empirical study. *SN Bus Econ* 1(79):1–28. <https://doi.org/10.1007/s43546-021-00073-6>

- Kuhnert KW, Lewis P (1987) Transactional and transformational leadership: a constructive/developmental analysis. *Acad Manag Rev* 12(4):648–657
- Leach L, Hastings B, Schwarz G, Watson B, Bouckennooghe D, Seoane L, Hewett D (2021) Distributed leadership in healthcare: leadership dyads and the promise of improved hospital outcomes. *Leadersh Health Serv* 34(4):353–374
- Lee YH (2019) Emotional intelligence, servant leadership, and development goal orientation in athletic directors. *Sport Manag Rev* 22(3):395–406
- Lee H, Choi B (2003) Knowledge management enablers, process, and organizational performance: an integrative view and empirical examination. *J Manag Inf Syst* 20(1):179–228
- Linnenluecke MK, Griffiths A (2010) Corporate sustainability and organizational culture. *J World Bus* 45(2010):357–366
- Lowe KB, Galen Kroeck K, Sivasubramaniam N (1996) Effectiveness correlates of transformational and transactional leadership: a meta-analytic. *Leadersh Q* 7(3):385
- Nguyen HN, Mohamed S (2011) Leadership behaviors, organizational culture and knowledge management practices: an empirical investigation. *J Manag Dev* 30(2):206–221
- Ozcelik H, Langton N, Aldrich H (2008) Doing well and doing good: the relationship between leadership practices that facilitate a positive emotional climate and organizational performance. *J Manag Psychol* 23(2):186–203
- Packard T (2009) Leadership and performance in human services organizations. Chapter 7 in the handbook of human services management. SGAE, London, pp 143–164
- Parolini J, Patterson K, Winston B (2009) Distinguishing between transformational and servant leadership. *Leadersh Org Dev J* 30:274–291
- Pitelis CN, Wagner JD (2019) Strategic shared leadership and organizational dynamic capabilities. *Leadersh Q* 30(2):233–242
- Politis JD (2002) Transformational and transactional leadership enabling (disabling) knowledge acquisition of self-managed teams: the consequences for performance. *Leadersh Org Dev J* 23(4):186–197
- Rafferty AE, Griffin MA (2004) Dimensions of transformational leadership: conceptual and empirical extensions. *Leadersh Quart* 15(3):329–354. <https://doi.org/10.1016/j.leaqua.2004.02.009>
- Rencher AC (1998) *Multivariate statistical inference and applications*. Wiley, New York
- Roy MH, Dugal SS (2005) Using employee gainsharing plans to improve organizational effectiveness. *Benchmarking* 12(3):250–259
- Rukmani K, Ramesh M, Jayakrishnan J (2010) Effect of leadership styles on organizational effectiveness. *Eur J Soc Sci* 15(3):365–369
- Samancioglu M, Baglibel M, Erwin BJ (2020) Effects of distributed leadership on teachers' job satisfaction, organizational commitment and organizational citizenship. *Pedagog Res*. <https://doi.org/10.29333/pr/6439>
- Savage-Austin AR, Honeycutt A (2011) Servant leadership: a phenomenological study of practices, experiences, organizational effectiveness, and barriers. *J Bus Econ Res (JBER)*. <https://doi.org/10.19030/jber.v9i1.939>
- Shen J, Zhu CJ (2011) Effects of socially responsible human resource management on employee organizational commitment. *Int J Hum Resour Manage* 22(15):3020–3035
- Shiva MM, Suar D (2012) Transformational leadership, organizational culture, organizational effectiveness, and programme outcomes in non-governmental organizations. *Voluntas* 23(3):684–710
- Spears LC (2002) *Focus on leadership: servant leadership for the 21st century*. Wiley, New York
- Tayal R, Upadhyay RK, Singh R (2021) Transformational leadership: an antecedent for organizational effectiveness in Indian banks. *VINE J Inf Knowl Manag Syst*. <https://doi.org/10.1108/VJIKMS-09-2020-0165>
- Taylor A, Cocklin C, Brown R, Wilson-Evered E (2011) An investigation of champion-driven leadership processes. *Leadersh Q* 22:412–433
- Thompson KN (2010) *Servant-leadership: an effective model for project management*, Ph.D. Dissertation, Capella University. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.365.7418&rep=rep1&type=pdf>
- Tyagi N (2021) Aligning organizational culture to enhance managerial effectiveness of academic leaders: an interface for employee engagement and retention. *Int J Educ Manag*. <https://doi.org/10.1108/IJEM-10-2020-0447>
- Van Dierendonck D, Nuijten I (2011) The servant leadership survey: development and validation of a multidimensional measure. *J Bus Psychol* 26:249–267

- Van Dierendonck D, Stam D, Boersma P, De Windt N, Alkema J (2014) Same difference? Exploring the differential mechanisms linking servant leadership and transformational leadership to follower outcomes. *Leadersh Q* 25(3):544–562
- Walton EJ, Dawson S (2001) Managers' perceptions of criteria of organizational effectiveness. *J Manag Stud* 38(2):173–199
- Weissenberger-Eibl MA, Hampel T (2021) Bridging the gap: integrating external knowledge from open innovation platforms. *SN Bus Econ* 1(98):1–32. <https://doi.org/10.1007/s43546-021-00101-5>
- Yasin Ghadi M, Fernando M, Caputi P (2013) Transformational leadership and work engagement: the mediating effect of meaning in work. *Leadersh Org Dev J* 34(6):532–550
- Zepke N (2007) Leadership, power and activity systems in a higher education context: will distributive leadership serve in an accountability driven world? *Int J Leadersh Educ* 10(3):301–314