



# The impact of ethical leadership on organizational identity in digital startups: does employee voice matter?

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Received: 21 December 2022 / Accepted: 25 July 2023 / Published online: 2 August 2023  
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## Abstract

Ethical leadership can lead to preparing the ground for employee voice, highlighting employees' creativity, and encouraging knowledge-sharing behavior in the organization. Thus, this study examines the impact of ethical leadership on organizational identity with the mediating role of employee voice in digital startups. However, previous studies investigating the relationship between ethical leadership and organizational identity disregarded the intervening role of employee voice in this relationship. A cross-sectional design using a sample of 137 managers of digital startups in science parks. Through the PLS3 software, the results show that employees tend to discuss their work-related opinions and concerns more often if they consider their leaders trustworthy, and this can lead to competitive advantage and quick responses to environmental crises. According to the findings of this study, ethical leadership can prepare the ground for employee voice, highlight employees' creativity, and encourage knowledge-sharing behavior in the organization. Hence, we suggest that leaders demonstrate personal integrity, openly receive employees' ideas and recommendations, treat employees impartially, and attempt to maximize the benefits to their employees.

**Keywords** Competitive advantage · Ethical leadership · Employee voice · Organizational identity · Digital startups

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## Introduction

In an increasingly mutually reliant, complicated, and dynamic environment, digital startups attempt to implement innovative approaches for service delivery and decrease expenses (Salamzadeh et al., 2021). Therefore, digital startups management is confronted with complexities in developing countries like Iran, such as the lack of trust among employees, little creativity and knowledge-sharing, improper hierarchical and governmental structure, lack of a proper business model, lack of material and spiritual incentives to foster innovation, lack of enthusiasm for innovation, inadequate technical skills of employees, low level of hardware and software technology, and insufficient support by the government (Madhoshi & Kia Kojouri, 2018).

Similar to other companies, digital startups have financial and commercial concerns and aim to create wealth. However, these companies attempt to generate wealth through scientific research development and upgrading sophisticated and efficient technologies, which is the main difference between their goal and other commercial companies (NawzadSabir et al., 2019). Digital startups have the potential to grow more, compared to mature firms, expressing that they can have more workforce or the opportunity to grow with less capital than older companies (Epstein & Yuthas, 2017).

Despite the powerful mechanism of employee voice as a mediating variable in the relationships between ethical leadership and organizational identity, there is little evidence in previous studies regarding the mediation of employee voice in such a relationship. According to researchers, there is ample evidence of the correlation between leadership styles (authoritarian, ethical, and servant) and employee voice. Ullah et al. (2020) and Bai et al. (2019) have investigated the impact of ethical leadership on employee voice. But, these two studies failed to examine organizational identity (Bai et al., 2019; Ullah et al., 2020). On the other hand, irrespective of the mediating role of employee voice behavior, the relationship between organizational identity and ethical leadership has been assessed by Qian & Jian, (2020). Therefore, organization identification is an individual's perception of their position, including how they perceive themselves as part of the organization (Akhmadi et al., 2023). Researchers have rarely examined the relationship between organizational identification and employee voice in a single model (e.g., Hu & Casey, 2021); instead, organizational identification has been documented as a mediator or moderator. For example, organizational identification has been shown to moderate employee voice (Knoll et al., 2021). However, researchers also acknowledge that organizational identification plays an intermediate role in forming employee voices (Zhuang et al., 2021). Organizational identification and voice are the result of social interaction between employees and the organization. Social exchange theory assumes that the exchange between employees and the organization is a reciprocal relationship, where good treatment by the organization will attempt to be reciprocated by employees with similar actions (Akhmadi et al., 2023). In other words, when companies respect their employees, similar actions will be reciprocated concerning the company's employees. If

the company provides fair treatment and promotes an open climate for employee input, employees will not hesitate to contribute by voicing ideas, information, and important inputs to the organization (Charkhkar et al., 2022). In line with social exchange theory, social identity theory is based on the premise that individuals identify as part of a group. In other words, individuals can use group identity to describe their own identity (Islam et al., 2018). Social identity theory assumes that individuals evaluate various situations, including conflict, injustice, and discrimination, resulting in a tendency to evaluate negatively in their group. However, the respect and prestige they receive encourage stronger self-identification within the group (Fuller et al., 2006). Existing studies have used social exchange theory and social identity theory as theoretical bases to explain organizational identification and employee voice behavior (Achmadi et al., 2022; Wang & Yen, 2021).

This study intends to address such a theoretical gap by evaluating the impact of employee voice on the interaction between organizational identity and managers' ethical leadership. According to previous studies, different kinds of leadership demonstrate a discrete association with self-awareness, self-agreement, stakeholders, and normative values. The differences in these leadership models and their respective ethical bases indicate the potential disputes among such ethical approaches (Lemoine et al., 2019).

According to Brown et al. (2005), ethical leadership is "the demonstration of normatively appropriate conduct through personal action and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making." (p. 120) (Brown et al., 2005). Ciulla (2014) documented some of the earliest writings concerning ethics of leadership. The interest in understanding the nature of ethical leadership, both in academic and non-academic circles, has been buttressed by many occurrences that have cast doubts on the values and morals of leaders about what society deems appropriate. Despite this centrality, ethical leadership issues need to be addressed (Ciulla, 2014).

It has been seen to be a new area of research that lacks strong research findings to substantiate it owing to being in its early stages of development. Northouse (2016) notes that there is a need for more research studies to establish theoretical foundations and dimensions of the discipline (Northouse, 2016). Shakeel et al. (2019) advance the need for ethical leadership to be understood as a process because ethics play a critical role in all forms of leadership regardless of the theories or styles in question (Shakeel et al., 2019). Lastly, according to Northouse (2016), families and communities are the main sources of teaching most people morally appropriate behavior and being. Furthermore, in a self-reinforcing cycle, ethical leadership influences through role modeling and perpetuates through the same means. Unfortunately, many attempts at addressing the challenge of leaders' unethical behavior and further developing ethical leadership are often focused at formal institutional levels where unethical behavior might have already been concretized and hence harder to change (Maina, 2022). Northouse (2016) asserts that good values often become part of somebody and habitual when practiced over time. Therefore, there are diverse perspectives as to what constitutes ethical leadership.

While some studies depicted ethical leadership to entail who ethical leaders are, others focus on what they do while yet others espouse ethical leadership to be the outcomes it affects, and still, others relate to the reasons or justifications assigned by leaders for their actions (Brown et al., 2005; Maina, 2022; Sharma et al., 2019). From the explored literature, ethical leadership thus concerns itself with what the leader does and who they are, their motivations, behavior, basis in making decisions, and their focus on developing others. The salient issue that seems not to be conclusive and which the author aims to contribute to regarding ethical leadership conceptualization is a focus on honesty, trust, and power-sharing (Hosseini et al., 2021). This is in line with past arguments on the need for ethical leadership to pay attention to issues related to empowerment, power-sharing, human rights, building community, honesty, trust, and positive reinforcement apart from the negative reinforcement as implied by previous conceptualizations (Maina, 2022; Shakeel et al., 2019).

Consequently, ethical leaders can demonstrate favorable behaviors and values to motivate employee participation and knowledge-sharing, leading to product, procedure, and service innovation. Since employee voice can provide adequate information to prepare the ground for organizational identity, it is imperative to evaluate its mediating role in the association between organizational identity and ethical leadership style.

Therefore, this study aims to assess whether ethical leadership style impacts on organizational identity, considering the mediating role of employee voice in digital startups in Iran. The research population includes the founders and managers of digital startups located in the science parks of the University of Iran including Yazd University in 2021.

This survey can add to the mainstream literature in the following manners: (1) it extends the employee voice literature and relates it to innovative, ethical leadership in its own right. It also highlights that the managers may use ethical leadership in digital startups, and (2) examining the mediating effect of employee voice contributes to the components of ethical leadership and organizational identity.

## Theoretical background and hypotheses

Human behavior is acquired through direct experiences (such as the results of punishments or rewards) and indirect experiences by observing others' behaviors and outcomes (Bandura, 1965). Accordingly, Bandura (1965) put forward the social learning theory to emphasize the important role of observational learning in motivating individual behaviors. Brown et al. (2005) described ethical leadership as a process of social learning through which employees can acquire direct and indirect experience in terms of ethics, moral values and codes by observing ethical leaders' role modeling and management practices such as encouraging communication, contingent reward, and fair decision-making. Drawing from social learning theory, the literature argued that ethical leaders are legitimate models of employee normative behavior (e.g., voice). Through copying ethical leaders' examples of speaking out against inappropriate actions (Walumbwa & Schaubroeck, 2009) or gaining positive vicarious experiences from those who ethical leaders reward for engaging in voice

(Qi & Ming-Xia, 2014), employees learn that voice is expected and rewarded in their organizations, thereby reinforcing their knowledge of the necessity and importance of speaking out.

On the contrary, if a leader fails to set ethical standards through visible actions or implement a reward system, they would be perceived as “ethically neutral” (Trevino et al., 2000). As a result, employees may be complacent, focusing on their short-term interests and be silent concerning others’ inappropriate behaviors (Lee et al., 2017). Later on, social exchange theory was used as a supplement to social learning theory by a growing number of scholars to explain the effect of ethical leadership on employee communicative behaviors, indicating a focus shift from “leader influence” to “employee feedback” (Qi & Ming-Xia, 2014). Social exchange theory Blau (1964) asserts that the principle of reciprocity generally drives people; that is, when they gain positive feelings during their interpersonal interactions with others, they are likely to reciprocate to others for the favorable treatment they received (Blau, 1964). Accordingly, in an organizational context, employees are willing to engage in good job performance or extra-role behaviors when satisfied with the work environment or the treatments the organization or manager provided (Ng & Feldman, 2012).

Based on the perspective of social exchange theory, the literature argued that the relationship between an ethical leader and their followers is termed “social exchange” rather than “economic exchange.” Such a relationship is based on shared identity, emotional connections, trust, caring and respect between the parties, reinforcing employees’ identification, affective trust, and loyalty to their leaders and organizations (Qi & Ming-Xia, 2014; Rasheed et al., 2017). Employees involved in social exchange relationships would be motivated to reciprocate their leaders’ actions regarding extra effort and extra-role behaviors, such as voice (Li, 2022).

Through ethical leadership, leaders could develop a code of conduct to guide organizational behaviors, leading to positive outcomes, including good job performance, proactive behaviors such as helping and voice, and organizational commitment. Among those outcomes, employee voice (i.e., employees offer promotive or problem-focused suggestions) and employee silence (i.e., employees intentionally withhold information and ideas that might be useful to their organizations) have received a large amount of attention as employees’ use of voice involves complicated motivations and determines the success of the organization of all kinds (Morrison, 2014).

The current literature suggests that ethical leaders can encourage employees’ use of voice and reduce employee silence as such leaders occupy themselves in leading activities, such as caring about the best interests of followers and optimizing work settings and environment to promote followers’ potentials (Hassan et al., 2014). The idea has been empirically supported by a handful of cross-sectional studies that reported ethical leadership positively predicted employee voice (Qi & Ming-Xia, 2014; Walumbwa & Schaubroeck, 2009) while negatively predicting employee silence. However, there is also the possibility of reverse causation in the target variables—that is, leaders may benefit from followers’ voice to continually advance their leadership behaviors to meet followers’ expectations of ethical leadership (Li, 2022).

Leaders are the key component in the managerial chain of organizational identification since the more a leader effectively mobilizes and influences followers,

the more they will be seen as group prototypical and as someone who can embody what is defining about the group identity (Hogg et al., 2012). Ethical leaders are the people who are more prototypical in an organization in which business ethics and sustainable development are high on the agenda. For example, ethics is the key competence in the public sector that should be highlighted when selecting the right person to succeed in a leadership position.

Ethical leaders guide the organization toward sustainable development and have advantages in shaping internal brand and external prestige (Van Knippenberg, 2011). Such contributions of ethical leadership play a critical role in cultivating employees' organization identification. Ethical leaders manage followers in a caring and humane-based way. They are caring listeners, encouraging the free airing of views, paying more attention to their followers' potential and values, and encouraging innovation and development (Brown et al., 2005; Li, 2022).

Consequently, the followers are likely to generalize supervisory treatment to organizational treatment and sublimate their satisfaction and positive emotions into the identification and commitment toward their organization. Organizational identification leads one to experience organizational identity as both self-describing and self-guiding (Hogg et al., 2012). If employees define themselves by the same moral attributes or positive virtues that define their organization, they are more likely to engage in voice on behalf of organizational agents and vice versa. Secondly, organizational identification motivates a person to see him- or herself through the lens of organizational membership and enables the person to take the organization's best interest to heart and incorporate the organizational interest into their self-worth (Van Knippenberg, 2011). Therefore, the salient "collective self" would be the driving motive forcing employees to play a good role in defending misbehaviors and have a go at providing positive suggestions for the sake of the organization.

Moreover, it is believed that the ethical leaders' development of employee voice can lead to organization identity. Consequently, perception of organizational identity associated with employees' individual and organizational values can lead to unity within the organization. It will likely be established through verbal communication (Kopaneva, 2021). Particularly, Peng & Wei (2020) believed that employee voice could be encouraged through the significant effects of ethical values in organizations. Consequently, behavioral integrity, open workplace environment, and organizational ethical values can effectively result in employee voice (Peng & Wei, 2020). Bednar et al. (2020) asserted that HRM pursues communicative processes involving the distribution of organizational values, goals, and perspectives. It will help employees manage the constant changes and challenges at work (Bednar et al., 2020). Therefore, organizational identity can moderate occupational outputs, team dynamics, motivational elements, and employees' behaviors and viewpoints (Zagenczyk et al., 2021). So, ethical leaders aim to prepare and inspire employees to seek organizational identity because they will be more likely to endeavor to achieve organizational goals in the long-run.

Hypothesis 0: Employee voice mediate role in the significant relationship between ethical leadership and organizational identity.

Employees observe their leader's behavior through role modeling and learn task requirements, appropriate behavior, and expected performance (Ogunfowora et al., 2021). Accordingly, employees are encouraged to speak to their leader when they notice inappropriate behavior that contradicts what they have learned. For instance, previous studies have revealed that employees' willingness to report problems is important to ethical leaders (Thi-Minh-Ngoc Luu & Pham, 2020). Moreover, Watson et al. (2014) proposed that the following five issues can encourage sustainable employee involvement: (1) leaders can build mutual trust in the organization and emphasize organizational values; (2) leaders' trustworthiness can lead to a more positive organizational image in society; (3) leaders are required to plan for future perspectives, and help employees make efforts to achieve organizational objectives by empowering them to deal with possible changes; (4) leaders should help employees maintain a balance between their job and their personal life by providing flexible occupational duties and highlighting employees' health and well-being; and (5) leaders should develop positive communication with employees through mutual respect to help manage the barriers and obtain organizational success (Thiensiri, 2021; Watson et al., 2014).

Similarly, Liu et al. (2022) claimed that honesty, respect, and selflessness can positively impact employees' commitment and engagement, leading to organizational objectives (Liu et al., 2022). According to ethical leadership premises, leaders' behavioral trustfulness is critical as the organizational plans and ultimate outcomes (Bai et al., 2019). Eventually, employees may consider their manager a role model because of the leader's ethical characteristics such as trust and honesty (Ejaz et al., 2022).

Hypothesis 1: Honesty has a significant impact on organizational identity.

Hypothesis 2: Employee voice will mediate honesty and significantly impact the organizational identity.

Voice behavior is shown when ethical leaders inspire employees to express their suggestions and thoughts for development and courageously report inappropriate or immoral behavior (Kwak & Shim, 2017). According to Ullah et al. (2021), ethical leadership should ask employees to share ideas and constructive comments that help manage and resolve occupational challenges through innovative behaviors, open interactions, mutual trust, and a sense of fairness (Ullah et al., 2021). In addition, since ethical leaders create a climate of trust and fairness, employees feel they can speak to their co-workers about anything because they share the same principles taught by the same person (Cheng et al., 2022). Employees learn how to behave correctly by observing ethical leader behavior. When ethical leaders build an authentic and unbiased environment, they encourage subordinates to voice their suggestions and speak out about their thoughts without concern, thereby resolving possible complications and developing new working techniques (Natividade et al., 2021). Ali Chughtai (2016) claimed that innovative ideas and fresh opinion in the organization might indicate that employees are free to share their constructive comments, mainly when there are disagreements between employees and leaders (Ali Chughtai, 2016). Brown & Treviño (2006) asserted that dependability and fairness

are among employees' valued leadership characteristics. Such virtues can determine the ethical leader's acceptance in the organization as a trusted role model, which leads to greater employee engagement (Brown & Treviño, 2006). Ethical leadership endorses organizational identity because it can develop ethics and trustworthiness among employees and enhance organizational ethical norms (Arshad et al., 2021).

At the conceptual level, leaders who are seen as more trusting should promote and raise identification with the work group or organization (Tyler & Smith, 2014). Specifically, because ethical leaders are proactive, which, in turn, increases cooperation accordingly, we expect such leaders should promote organizational identification. Scholars' research (Al Halbusi et al., 2020; Tyler & Blader, 2013) suggests that people identify more with social institutions when trust is present and individuals' need for psychological safety is met. Empirical research provides evidence for this notion. For example, several studies have shown that characteristics of ethical leaders, such as openness and trustworthiness, are positively related to organizational identification (Qi & Ming-Xia, 2014). It will then prepare the grounds for the attainment of organizational objectives.

Hypothesis 3: Trust has a significant impact on organizational identity.

Hypothesis 4: Employee voice will mediate trust and significantly impact the organizational identity.

Studies have been conducted on the relationship between employee voice and ethical leadership, showing that ethical leadership positively influences employee voice (Bai et al., 2019; Zhu et al., 2019). Furthermore, ethical leaders motivate employees to speak about ethical issues. Research by Weiss et al. (2018) has also indicated that leaders' features and the use of inclusive language such as "we," "our," and "us" have a positive influence on voice behavior (Weiss et al., 2018). However, Bhatti et al. (2021) claimed that the effect of ethical leadership on voice behavior is not equal across each employee since employees' own moral values are not the same (Bhatti et al., 2021). For instance, employees who believe that people's character is fixed, such as strong moral beliefs, may not be willing to speak up because they think change is impossible, and voicing is thus pointless.

After reviewing prior studies, Kalshoven et al. (2011) developed a seven-dimensional model of ethical leadership behavior: integrity, fairness, role clarification, orientation, ethical guidance, collaboration, and sharing power. The first three dimensions (fairness, power-sharing, and role clarification) are also supported by earlier scholars. The fairness dimension demonstrates how leaders maintain integrity in treating their colleagues (Kalshoven et al., 2011). Their choices are fair and free from favoritism, which is why their behaviors are trustworthy. Power-sharing dimension of ethical leadership demands a decentralized decision-making process. The leader listens and accommodates various ideas of the followers (Gollagari et al., 2021). Under power-sharing, they consider the followers equal partners and allow them to play a larger role in decision-making. Moreover, the ethical leader's fair attitude towards the group, the ability of



the leader to share power with the followers, and clarifying their role expectations make the leader a credible and legitimate figure for the followers, which enhances followers' trust in the leader (Sharma & Pardasani, 2021). Researchers called it an empowering dimension of ethical leadership. Maintaining transparency in communication is the root of ethical leadership's third dimension (role clarification). The ethical leader must clarify the subordinates' performance expectations and related responsibilities.

Hypothesis 5: Sharing power can significantly influence organizational identity.

Hypothesis 6: Employee voice mediates the positive relationship between power-sharing and organizational identity.

## Methodology

### Sample and data collection

The present quantitative study is applied in terms of research methodology. The statistical population encompasses the managers and the creators of digital startups in the science parks affiliated with the Yazd University in Iran in 2020 ( $N=213$ ). The managers of the sample were easier for authors to access these firms because of their locations, particularly during the COVID-19 pandemic. Iranian digital startups, private institutions that aim to implement innovations and commercialize their research outcomes, were selected as the statistical population for the present study. The researchers decided to conduct this study on those digital startups that provide knowledge-based services, including producing new technology or products, proposing consultation services, and performing applied studies. Given that the customers will immediately acknowledge any improper services by digital startups, the respective managers are required to make sure the customers are provided with high-quality services so that they can develop a competitive advantage. Moreover, their extensive communications with other companies or a wide number of customers has led these managers to focus on knowledge employees' voice to tackle potential problems and propose innovative solutions accordingly.

The following inclusion criteria were applied in this study: a minimum of 5 years of providing services and an experience of failure and revival. The proposed questionnaire includes 20 items based on a five-point Likert scale (from 1 = strongly disagree to 5 = strongly agree). The Press Line website was used to generate the questionnaire, and a link was sent to the study samples. Besides, the managers were asked to complete an informed consent form, and they were ensured of the confidentiality of the collected data. Moreover, they could leave the experiment with no detrimental consequence. As a result of the present study, a random sampling approach was implemented based on Cochran's formula, and 137 individuals were selected accordingly.

## Measures

### Dependent variable

The organizational identity in digital startups was regarded as the dependent variable. The authors decided to employ the standard organizational identity questionnaire (OIQ), developed and validated by Cheney (1983), to investigate central components of organizational identity. The original instrument was one of the most common measures of organizational identity with 25 items; however, Miller et al. (2000) proposed a shorter version of this instrument with 12 items (Table 1).

### Independent variable

Ethical leadership was regarded as the independent variable. Accordingly, honesty, power-sharing, and trust were measured using the questionnaire proposed by Trevino's et al. (2000). The components of the ethical leadership scale are demonstrated in Table 1.

### Mediating variable

The employee voice was considered the mediating variable in the present study, and Van Dyne and Le Pine proposed the original scale to measure employee voice (1998). Nonetheless, the authors decided to employ the modified version of this questionnaire developed and validated by Maynes and Podsakoff. (2014), which contains 15 items. Consequently, employees were asked to determine the extent of compatibility between these items and their behavior (Table 1).

The potential relationships between the research variables were assessed using SEM within Smart PLS3 software which is generally selected because it does not necessarily require normal data distribution and applies to a sample size lower than 200 (Kline, 2015).

## Results

Based on the analysis of the quantitative data, 53% of the respondents were men and 47% were women; 29% held a PhD and 71% held a master's degree; 41% were single and 59% were married; 24% had five 57% had 5–10 and 19% had more than 10 years of experience.

Convergent and discriminant validity were assessed to examine the construct validity through SEM. Moreover, composite reliability and Cronbach's alpha coefficient were measured to ensure the reliability of the questionnaire. The validity and reliability of the variables were confirmed (Table 2). Since the average variance extracted (AVE) index was higher than 0.5, the convergent validity of

**Table 1** Measurement of variables

Items	Loading factor	T-test	Mean	Std dev
<i>Ethical leadership</i> (Trevino et al., 2000)				
The manager conducts themselves by the same values that they talk about	0.960	87.667	4.21	0.75
When the manager promises something, I can be certain it will happen	0.943	57.011	3.96	0.94
If the manager says they are going to do something, they will do it	0.914	34.127	3.91	0.81
The manager shows the same priorities that they describe	0.929	58.859	4.01	0.82
My supervisor is investing a great deal in my career	0.889	36.756	3.69	0.92
I often share my novel ideas with my supervisor	0.872	24.910	3.55	0.41
I am open to my supervisor's suggestions regarding my work	0.905	35.479	3.62	0.94
I work based on my own preferences	0.894	37.056	3.71	0.96
The leader will also make decision based on group members' suggestions	0.836	23.299	4.10	0.89
The leader will assign responsibility opportunities to all the group members	0.879	38.196	3.93	0.91
The leader will operationalize group decisions and measures	0.805	17.129	4.06	0.91
The leader will encourage group members to put their ideas into action	0.881	31.932	4.06	0.88
<i>Employee voice</i> (Maynes and Podsakoff, 2014; Van Dyne and Le Pine, 1998)				
I communicate my opinions about work issues to the supervisor even if my opinion is different and the supervisor disagrees with me	0.901	15.741	4.04	0.91
I speak to the supervisor about new project ideas or procedure changes	0.973	24.643	3.51	0.90
I speak to my supervisor to eliminate redundant or unnecessary procedures	0.943	31.781	3.64	0.76
I try to persuade my supervisor to change organizational rules or policies that are nonproductive or counterproductive	0.952	23.047	4.28	0.83
<i>Organizational identity</i> (Cheney, 1983; Miller et al., 2000)				
I believe the organization considers me valuable	0.907	23.372	3.51	0.67
In general, I consider organizational problems as my own issues	0.933	48.480	3.58	0.87
I am satisfied with spending more time than expected for the organization	0.969	76.325	3.82	0.93
I respect the outcomes and the future of this organization	0.920	41.050	4.11	0.91

**Table 2** Composite reliability, Cronbach's alpha, AVE

Construct	Variable	Items	Alpha	rho-A	C.R	AVE	R <sup>2</sup>	Q <sup>2</sup>
Ethical leadership	<b>Honesty</b>	1–4	0.759	0.906	0.953	0.637	--	--
	<b>Trust</b>	5–8	0.953	0.957	0.966	0.877	--	--
	<b>Power-sharing</b>	9–12	0.751	0.932	0.962	0.665	--	--
Employee voice	--	13–16	0.872	0.879	0.913	0.724	0.752	0.661
Organizational identity	--	17–20	0.913	0.921	0.939	0.793	0.688	0.634

the instrument was confirmed. Furthermore, the reliability of the questionnaire was established as the Cronbach's alpha coefficient and composite reliability index was over 0.7.

Given that all the divergent validity values were higher than 0.5, it is ensured, respectively. In addition, the convergent validity of the questionnaire was also confirmed because all the obtained values were higher than the correlations between the variables (Fornell & Larcker, 1981). Furthermore, since the obtained values of the root mean variance are greater than the correlation of the target variable with other variables, divergent validity will be accepted if the numbers in the main diameter are greater than the values below the diameter. Therefore, it can be said that the variables are valid, and their divergent validity is also confirmed (Table 3).

Variance inflation factor (VIF) evaluates the severity of multiple collinearity in ordinary least squares regression analysis. To put it more simply, the VIF index shows how much a variable changes its behavior when influenced by other variables. The VIF index shows to what extent the variation in the estimated coefficients has increased due to collinearity. The severity of multiple collinearity can be analyzed by evaluating the magnitude of the VIF value. According to mathematics, the variance inflation factor for the variable of the regression model is the ratio of the model's overall variance to the model's variance with an independent variable. A multiple regression model is applied to investigate the effect of several variables on the same outcome. Here, the effect of independent variables on dependent variables is identified. The independent variables constitute the inputs of the model. The high correlation between variables makes them less independent. Accordingly, the correlation between the variables in the multiple regression model is problematic when testing the variables. It is challenging to determine how much the combination

**Table 3** Convergent validity

Variables	Employee voice	Honesty	Organizational identity	Power-sharing	Trust
Employee voice	<b>0.908</b>				
Honesty	0.814	<b>0.937</b>			
Organizational identity	0.755	0.763	<b>0.816</b>		
Power-sharing	0.850	0.862	0.812	<b>0.909</b>	
Trust	0.750	0.801	0.707	0.851	<b>0.890</b>

of independent variables influences the dependent variable or the outcome of the regression model (Kock, 2015; Tajpour et al., 2023). Since all scales were investigated by the self-report method to make sure no common method bias existed in the research, Kock (2015) proposed that the proposed model could be considered bias-free if all VIFs, on account of a full collinearity test, were similar to or below 3.3 (Kock, 2015). Accordingly, the VIF values for honesty(VIF=2.748), power-sharing (VIF=2.460), trust (VIF=2.352), employee voice (VIF=2.845), and organizational identity (VIF=2.435) were less than 3.3, showing that the model was free of common method bias.

### Structural equation model

*T*-values, standard beta, *R*-square, and predictive relevance ( $Q^2$ ) were measured to assess the proposed model. According to Thomas (2003), and for the 95% confidence level, the accepted *t*-values should be higher than 1.96. Given that the obtained *t*-value is over 1.96 (Fig. 1), all the relationships were ensured accordingly (Thomas, 2003). In other words, there is a significant relationship between ethical leadership in digital startups and organizational identity through the mediating role of employee voice.

The coefficient of determination ( $R^2$ ) was the other indicator of the goodness of fit, revealing the study’s internal variables.  $R^2$  was used to determine the correlation intensity between constructs regarding dependent variables. This criterion examines the intensity of the relationships between constructs, which only applies to

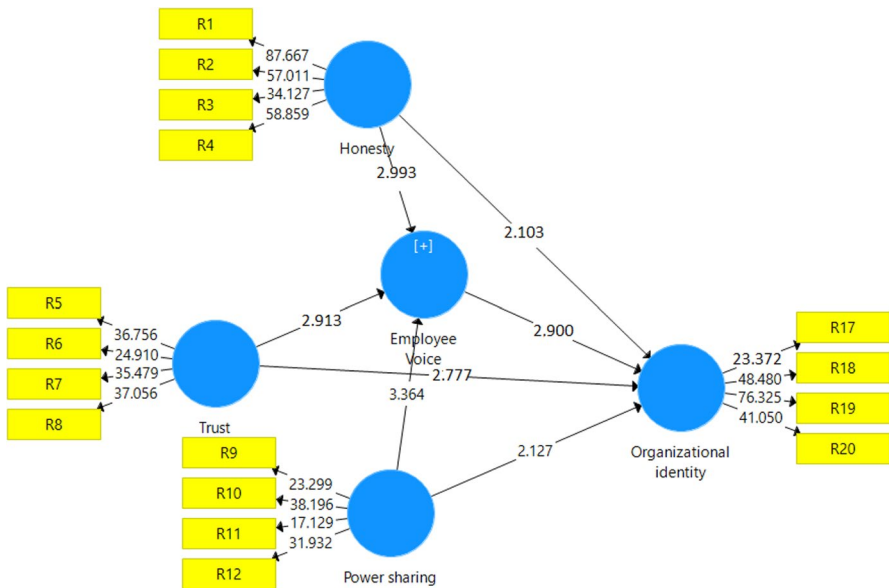


Fig. 1 T-values

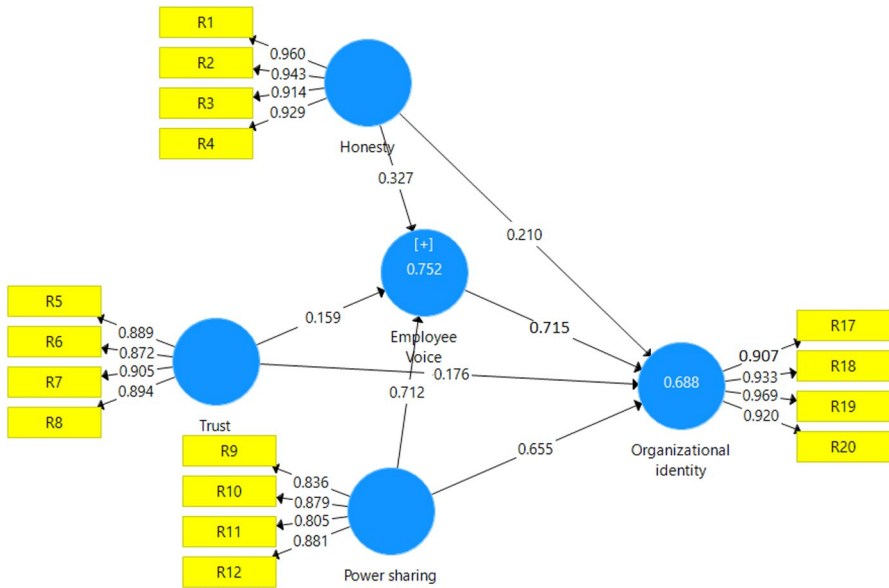


Fig. 2 R-square

dependent and not independent constructs.  $R^2$  is a criterion that indicates the effect of exogenous variables on an endogenous variable, and three values of 0.19, 0.33, and 0.67 are considered for weak, medium, and strong values of  $R^2$  (Hair Jr et al., 2021). The results suggest that the obtained  $R$ -square values for employee voice and organizational identity were 0.752 and 0.688, respectively (Fig. 2).

The PLS-SEM algorithm was used to calculate the path coefficient of the structural model between  $-1$  and  $+1$ , where the positive and highly correlated value is closer to  $+1$ , the negative and highly correlated value is closer to  $-1$ , the closer the value to  $0$ , the weaker the relationship (Li et al., 2019). The impact coefficient of honesty on the organizational identity is equal to (0.210), the coefficient of influence of honesty on organizational identity mediated by employee voice is equal to (0.327), the impact coefficient of trust on organizational identity equals (0.176), coefficient of influence of trust on organizational identity mediated by employee voice equals (0.159), impact coefficient of power sharing on the organizational identity is equal to (0.655), and coefficient of influence of power-sharing on organizational identity mediated by employee voice is equal to (0.712).

**Predictive relevance ( $Q^2$ )**

The  $Q^2$  criterion is calculated for all dependent constructs. It represents the product of the combined values of the research constructs in the values of the coefficient of determination related to them. This criterion, introduced by Stone (1977), determines the model’s predictive power in dependent variables. According to them,

models with an acceptable structural fit should be able to predict the characteristics of the endogenous constructs of the model (Stone, 1977). This means that if the relationships between constructs are properly defined in a model, the constructs will be able to have a sufficient impact on each other's characteristics, and thus the hypotheses are correctly confirmed. The value should be 0.2, 0.15, and 0.35 for all endogenous constructs with low, medium, and strong predictive power (Kline, 2015). The results indicated the  $Q^2$  values of 0.661 and 0.634 for employee voice and organizational identity, respectively. Consequently, these predictive relevance values are acceptable for the present study's dependent variables.

### Goodness of fit (GOF)

Lastly, we calculated the overall GOF for the structural and measurement model. This index represents the square of the shared values' average and the determination coefficients' average. The obtained value is a number between zero and one. The closer the GOF index is to one, the better the model fits. The potential values of 0.01, 0.25, and 0.36 can illustrate low, average, and high GOF, respectively (Henseler & Sarstedt, 2013). According to the following formula 1, GOF index was calculated 0.813 for this study, which is recognized as an acceptable value:

$$\text{GOF} = \sqrt{\text{average(Communality)} \times \text{average}(R^2)} \quad (1)$$

Communality=This value is obtained from the average of the squared factor loadings of each variable (*Communality*=0.919).

$R^2$ =it represents the average value of  $R$ -square of endogenous variables of the model ( $R^2$ =0.720) (Hair et al., 2021).

Moreover, the standardized root mean square residual (SRMR) and the Bentler–Bonett indexes were measured to assess the fitness of the proposed model. The SRMR value equals 0.081, and NFI equals 0.904. According to Kline (2015), the acceptable SRMR value should be lower than 0.1; besides, he claimed that the proper Bentler–Bonett index or normed fit index (NFI) should be between 0 and 1.

The Sobel test examined the role of mediation of employee voice in digital startups.

a: The amount of the mediator and independent variable pathway coefficient: 0.399.

b: The amount of the mediator and dependent variable pathway coefficient: 0.715.

c: The amount of the dependent and independent variable pathway coefficient: 0.347.

(sa) Standard error related to independent and mediator variable path=0.083.

(sb) Standard error related to the mediator and dependent variable path=0.071.

The value of 4.321 obtained in this test, which is higher than the baseline value of 1.96, indicates the mediating role of the structure of employee voice. The variance accounted for (VAF) test is performed to clarify the impact of employee voice on organizational identity. Variance accounted for (VAF) is a statistic that determines the mediating effect of a variable in the relationship between the independent and dependent variables. Considering the value of this

statistic, it is determined whether the effect of a mediating variable is weak, medium, or strong. VAF shows the ratio of indirect effect to the total.

Consequently, it can be determined to what extent the variance of the dependent variable is explained directly by the independent variable and to what extent indirect relationships explain the target variance. Finally, it can be determined to what extent the target variance is explained by indirect relationships through the mediating variable. On the condition that indirect effect is significant but does not attract any effect of the independent latent variable on the endogenous variable, the VAF variance inclusion is relatively low. It occurs when the high direct effect should decrease to a small extent after analyzing the mediating variable with a significant indirect effect. In this case, the VAF variance inclusion value will be less than 20%, and it can be concluded that mediation has not occurred.

On the contrary, complete mediation can be claimed if the VAF value is very large and above 80% (Hair et al., 2021). The situation is described as partial mediation when VAF is between 20 and 80%. The value of 0.451 obtained in this test indicates the role of partial mediation for the employee voice in the digital startups construct (Formula 2).

$$\text{VAF} = (a \times b) / (a \times b) + c \quad (2)$$

## Testing hypotheses

Notably, the potential relationships between the variables were examined using *t*-test. According to Table 4, the results of the *t*-tests on all the proposed sub-hypotheses (Hypotheses 1, 2; Hypotheses 3, 4, and Hypotheses 5, 6) led to the support of the main research hypothesis (Hypothesis 0). Moreover, the standardized factor coefficients were calculated to measure the pathways for all the hypotheses. Based on the effects of the predictive variables, the independent variables can only slightly account for the observed changes in the dependent variables.

Finally, the outcomes of PLS3 software could confirm the obtained critical values higher than 1.96, given the confidence level of 95%. The critical values of honesty on the organizational identity is equal to (2.103), the coefficient of influence of honesty on organizational identity mediated by employee voice is equal to (2.993), the critical value of trust on the organizational identity equals (2.777), coefficient of influence of trust on organizational identity mediated by employee voice equals (2.913), the critical value of power sharing on the organizational identity is equal to (2.127), and coefficient of influence of power sharing on organizational identity mediated by employee voice is equal to (3.364). In other words, the pathways are considered meaningful; thus, the proposed structural model is appropriate. Moreover, the findings indicated that power-sharing is reported to have the highest effect on the organizational identity through the mediating role of employee voice.



**Table 4** Path relationships

Path	<i>t-value</i>	Coefficients	Hypotheses
Hypothesis 1: Honesty on organizational identity	2.103	0.210	Supported
Hypothesis 2: Honesty on organizational identity with mediating employee voice	2.993	0.327	Supported
Hypothesis 3: Trust on organizational identity	2.777	0.176	Supported
Hypothesis 4: Trust on organizational identity with mediating employee voice	2.913	0.159	Supported
Hypothesis 5: Power sharing on organizational identity	2.127	0.655	Supported
Hypothesis 6: Power sharing on organizational identity with mediating employee voice	3.364	0.712	Supported

## Discussion

It is essential to develop ethical standards and manage employees' behaviors in ethical leadership; it should include operationalizing these two factors. Empirical findings reveal that employee voice can help managers identify work-related problems and issues and facilitate innovation. Furthermore, organizational identity refers to an organization's critical, distinctive, and sustainable factors.

Consequently, ethical leaders support and treat their fellow employees with trust and truthfulness. According to Huang et al. (2021), the support coming from the employee could also affect employee attitudes and behaviors. Perceived support is how an employee perceives the leader or organization's support, which affects their working intention, job attitude, and performance (Huang et al., 2021). Consistent with the first and second hypotheses highlighting that truthfulness positively influences organizational identity considering the mediating role of employee voice, it is noteworthy that ethical leaders demonstrate their trustfulness to their employees by paying attention to their opinions and involving them in decision-making activities. Hence, such employees would be inspired to engage in organizational affairs through voice behavior. Newman et al. (2015) ethical leaders make decisions concerning ethical principles and ensure followers observe the ethical decision-making process (Newman et al., 2015).

Ethical leaders develop a sense of trust, respect, and altruism, which can positively impact employees. As a result, these employees are more likely to voice their ideas and challenge the status quo. It can lead to higher levels of commitment in sharing knowledge among colleagues and improvement of innovative performance at workplace. Moreover, ethical leaders may build long-term relationships and share values with respective employees by promoting trustworthy standards to learn new skills, promote their efficacy, and have courage to share their ideas and thoughts within the organization.

Concerning the third and fourth hypotheses highlighting the positive impact of trust on organizational identity through the mediating role of employee voice, it can be concluded that voice behavior is risky behavior, and employees prefer to remain silent. Nonetheless, if employees perceive that the organization is trustworthy and their voice behavior is safe and respected in the future, they will openly show their voice behavior. Employees can extend their focus toward a wide range of activities rather than remaining in an environment associated with uncertainties. As a result, employees would develop a sense of identity with the leader and organization and demonstrate collaborative behaviors. Rasheed et al. (2017) believed that ethical leaders could create a respectful and trustworthy environment that encourages employees' engagement in organizational programs (Rasheed et al., 2017). Many authors thus consider the environment a vital determinant of the organization's activities, and the dimensions of dynamism, hostility, and heterogeneity are usually implanted to describe the environment of companies (Li, 2022). Given that ethical leadership can facilitate and encourage interpersonal relationships at work, it has been particularly highlighted within this framework. Meanwhile, it might regulate appropriate behaviors due to such individual actions (Al Halbusi et al., 2020).

Given that highly organization identity-bound employees will be more engaged with voice behavior and organizational improvement, it is crucial to promote voice behavior to demonstrate a sense of identity among employees. Firstly, employees with higher organization identity are involved in communicative processes and consider themselves influential members. Secondly, such employees will integrate organizational values and norms into their self-concept to direct their occupation accordingly. As a result, employees with higher organizational identity are more likely to voice their constructive comments when organizational problems arise (Wu et al., 2015). Since ethical leaders can create an impartial environment emphasizing clear standards and ethical behaviors, respective employees are also expected to provide positive feedback.

The fifth and sixth hypothesis deals with the positive effect of power allocation on organization identity, considering the intervening role of employee voice. Hence, a delegation of power by ethical leaders may result in knowledge-sharing, learning, innovative performance, and creative ideas to resolve organizational problems. Therefore, employees will be more involved in the organization's current situation and propose more opinions accordingly. Besides, these employees will avoid voicing their opinions due to workload pressure and maintaining power. Consequently, developing organizational identity can lead to integrity among employees and the organization, highlighting employees' effectiveness. Eventually, it can result in promoting voice and proposing opinions among employees. Besides, Ariff et al. (2017) argued that people seek openness, transparency, responsibility, and reliability in businesses (Ariff et al., 2017).

Consequently, involving employees and managers to help resolve problems and challenges at work is crucial, particularly in digital startups. According to Yadav & Singh (2016), employees are required to get engaged in their pre-planned duties and other extra-role behaviors accordingly. For instance, employees can develop and implement the concept of voice to help promote the organization (Yadav & Singh, 2016). In this regard, Ellmer & Reichel (2021) concluded that employee voice includes proposing recommendations, engaging in empirical initiatives, discussing problems at the workplace, and encouraging colleagues to take similar steps (Ellmer & Reichel, 2021). As a result, such measures can enhance organizational performance and resolve procedural challenges (e.g., bureaucracy and inflexibility in providing various services).

## Practical implications

This study extends the voice literature by examining the mediating role of employee voice in the link between ethical leadership and organizational identity. There is significant evidence regarding the impact of employee voice and ethical leadership; however, previous studies investigating the relationship between ethical leadership and organizational identity disregarded the intervening role of employee voice in this relationship. Therefore, the present study highlights the mediating role of employee voice to address this gap in the voice literature.

Therefore, managers can motivate their fellow employees to participate actively and share their constructive comments by implementing mutual trust and understanding in the workplace. Moreover, employees will be more willing to voice their opinions and be creative if they perceive the leader emphasizes ethical issues in digital startups. Consequently, leaders must demonstrate fairness and reliability to benefit employees. The findings also revealed that ethical leaders would ask their employees to openly offer suggestions because they are regarded as important for the organization. Furthermore, leaders are recommended to facilitate knowledge-sharing and voice behavior by highlighting the organization's open, communicative channels. Eventually, it seems imperative for leaders and managers to participate in training programs concerning developing ethical leadership style at the workplace.

According to the findings of this study, ethical leadership can prepare the ground for employee voice, highlight employees' creativity, and encourage knowledge-sharing behavior in the organization. Hence, we suggest that leaders demonstrate personal integrity, openly receive employees' ideas and recommendations, treat employees impartially, and attempt to maximize the benefits to their employees.

### **Limitations and future research**

Despite the contributions, the current research is not free from limitations. For instance, the present study first implemented random sampling to collect cross-sectional data to examine the relationships. A limited sample of 137 individuals was selected for the study, which may not effectively represent the entire population. In the future, longitudinal studies are needed to predict the impact of ethical leadership on organizational identity with the mediating role of employee voice. A qualitative gesture may be given to assess such associations among employees.

Furthermore, it is recommended to conduct further studies to evaluate the impact of employee voice as an independent variable on the development of digital startups. Besides, there is a need for more inquiries regarding the effect of employee voice on innovation and creativity in such companies. The authors also believe researchers should consider the relationship between employee voice and knowledge-sharing. In addition, it is suggested to investigate the impact of employee voice on organizational commitment. In the end, the large sample size may be applied to get more suitable and generalized results.

### **Conclusion**

This study has contributed to the concept of ethical leadership based on the intervening role of employee voice in the connection between ethical leadership and organizational identity of digital startups. According to the findings, ethical leadership can encourage employee voice and ground-breaking performance of digital startups in Iran. Consequently, Iranian digital startups intent on emphasizing employee voice and developing HRM functions leading to employees' sharing ideas

in the organization. Eventually, there is a need to review employee voice since digital startups consider voice a fundamental strategy to promote innovative behavior.

**Funding** Open access funding provided by FCTIFCCN (b-on).

## Declarations

**Ethical approval** All of the authors list all the sources used based on ethical principles.

**Conflict of interest** The authors declare no competing interests.

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## References

- Achmadi, A., Hendryadi, H., Siregar, A. O., & Hadmar, A. S. (2022). How can a leader's humility enhance civility climate and employee voice in a competitive environment? *Journal of Management Development*, 41(4), 257–275. <https://doi.org/10.1108/JMD-11-2021-0297>
- Akhmadi, A., Hendryadi, S., Sumail, L. O., & Pujiwati, A. (2023). Islamic work ethics and employees' prosocial voice behavior: The multi-role of organizational identification. *Cogent Social Sciences*, 9(1), 2174064. <https://doi.org/10.1080/23311886.2023.2174064>
- Al Halbusi, H., Williams, K. A., Ramayah, T., Aldieri, L., & Vinci, C. P. (2020). Linking ethical leadership and ethical climate to employees' ethical behavior: The moderating role of person–organization fit. *Personnel Review*, 50(1), 159–185. <https://doi.org/10.1108/PR-09-2019-0522>
- Ali Chughtai, A. (2016). Can ethical leaders enhance their followers' creativity? *Leadership*, 12(2), 230–249. <https://doi.org/10.1177/1742715014558077>
- Ariff, A. M., Salleh, Z., Noor, M. N. H. M., Mohamad, N. R., & Ismail, N. (2017). Board diversity and innovation performance in Malaysia. *International Journal of Business Governance and Ethics*, 12(3), 241–261. <https://doi.org/10.1504/IJBGE.2017.088247>
- Arshad, M., Abid, G., & Torres, F. V. C. (2021). Impact of prosocial motivation on organizational citizenship behavior: The mediating role of ethical leadership and leader–member exchange. *Quality & Quantity*, 55(1), 133–150. <https://doi.org/10.1007/s11135-020-00997-5>
- Bai, Y., Lin, L., & Liu, J. T. (2019). Leveraging the employee voice: A multi-level social learning perspective of ethical leadership. *The International Journal of Human Resource Management*, 30(12), 1869–1901. <https://doi.org/10.1080/09585192.2017.1308414>
- Bandura, A. (1965). Vicarious processes: A case of no-trial learning. In *Advances in experimental social psychology* (Vol. 2, pp. 1–55). Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60102-1](https://doi.org/10.1016/S0065-2601(08)60102-1)
- Bednar, J. S., Galvin, B. M., Ashforth, B. E., & Hafermalz, E. (2020). Putting identification in motion: A dynamic view of organizational identification. *Organization Science*, 31(1), 200–222. <https://doi.org/10.1287/orsc.2018.1276>
- Bhatti, S. H., Kiyani, S. K., Dust, S. B., & Zakariya, R. (2021). The impact of ethical leadership on project success: The mediating role of trust and knowledge sharing. *International Journal of Managing Projects in Business*. <https://doi.org/10.1108/IJMPB-05-2020-0159>
- Blau, P. M. (1964). *Exchange and power in social life*. Piscataway, NJ: Transaction Publishers. 2nd Edition, New York, Routledge. <https://doi.org/10.4324/9780203792643>

- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17(6), 595–616. <https://doi.org/10.1016/j.leaqua.2006.10.004>
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117–134. <https://doi.org/10.1016/j.obhdp.2005.03.002>
- Charkhkar, S., Hosseini, E., & Sabokro, M. (2022). Reflections on individual mission: Mediating the impact of strategic talent management on entrepreneurial behavior and individual voice. *Journal of Research on Management of Teaching in Marine Sciences*, 9(1), 53–67. <https://doi.org/10.22034/rmt.2022.243969>
- Cheng, J., Bai, H., & Hu, C. (2022). The relationship between ethical leadership and employee voice: The roles of error management climate and organizational commitment. *Journal of Management & Organization*, 28(1), 58–76. <https://doi.org/10.1017/jmo.2019.49>
- Cheney, G. (1983). On the various and changing meanings of organizational membership: A field study of organizational identification. *Communications Monographs*, 50(4), 342–362.
- Ciulla, J. B. (Ed.). (2014). *Ethics, the heart of leadership*. ABC-CLIO. Third Edition in USA.
- Ejaz, T., Anjum, Z.-u-Z., Rasheed, M., Waqas, M., & Hameed, A. A. (2022). Impact of ethical leadership on employee well-being: The mediating role of job satisfaction and employee voice. *Middle East Journal of Management*, 9(3), 310–331.
- Ellmer, M., & Reichel, A. (2021). Mind the channel! An affordance perspective on how digital voice channels encourage or discourage employee voice. *Human Resource Management Journal*, 31(1), 259–276. <https://doi.org/10.1111/1748-8583.12297>
- Epstein, M. J., & Yuthas, K. (2017). *Measuring and improving social impacts: A guide for nonprofits, companies, and impact investors*. Routledge.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. In: Sage Publications Sage CA: Los Angeles, CA.18(3):382–388. <https://doi.org/10.1177/002224378101800313>
- Fuller, J. B., Hester, K., Barnett, T., Frey, L., Relyea, C., & Beu, D. (2006). Perceived external prestige and internal respect: New insights into the organizational identification process. *Human Relations*, 59(6), 815–846. <https://doi.org/10.1177/0018726706067148>
- Gollagari, R., Beyene, B. B., & Mishra, S. S. (2021). Ethical leadership, good governance and employee commitment: Testing a moderated mediation model in public universities of Ethiopia. *Journal of Public Affairs*, e2742.22(s1):1–12. <https://doi.org/10.1002/pa.2742>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (p. 197). Springer Nature. Cham, Switzerland. [https://doi.org/10.1007/978-3-319-57413-4\\_15](https://doi.org/10.1007/978-3-319-57413-4_15)
- Hassan, S., Wright, B. E., & Yukl, G. (2014). Does ethical leadership matter in government? Effects on organizational commitment, absenteeism, and willingness to report ethical problems. *Public Administration Review*, 74(3), 333–343. <https://doi.org/10.1111/puar.12216>
- Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, 28, 565–580.
- Hogg, M. A., Van Knippenberg, D., & Rast, D. E., III. (2012). Intergroup leadership in organizations: Leading across group and organizational boundaries. *Academy of Management Review*, 37(2), 232–255. <https://doi.org/10.5465/amr.2010.0221>
- Hosseini, E., SaeidaArdekani, S., & Sabokro, M. (2021). Investigating the leadership integrity on the voice of the employees by mediating the empowering behaviors of the leader (A case study: Yazd Travel Agencies). *Journal of Tourism and Development*, 10(1), 241–256. <https://doi.org/10.22034/jtd.2020.212471.1915>
- Hu, X., & Casey, T. (2021). How and when organization identification promotes safety voice among healthcare professionals. *Journal of Advanced Nursing*, 77(9), 3733–3744. <https://doi.org/10.1111/jan.14868>
- Huang, C., Du, P.-L., Wu, L.-F., Achyldurdyeva, J., Wu, L.-C., & Lin, C. S. (2021). Leader–member exchange, employee turnover intention and presenteeism: The mediating role of perceived organizational support. *Leadership & Organization Development Journal*, 42(2), 249–264. <https://doi.org/10.1108/LODJ-03-2020-0094>
- Islam, T., Ahmed, I., & Ali, G. (2018). Effects of ethical leadership on bullying and voice behavior among nurses: Mediating role of organizational identification, poor working condition and workload. *Leadership in Health Services*, 32(1), 2–17. <https://doi.org/10.1108/LHS-02-2017-0006>

- Kalshoven, K., Den Hartog, D. N., & De Hoogh, A. H. (2011). Ethical leadership at work questionnaire (ELW): Development and validation of a multidimensional measure. *The Leadership Quarterly*, 22(1), 51–69. <https://doi.org/10.1016/j.leaqua.2010.12.007>
- Kline, R. (2015). *Principles and practice of structural equation modeling*. London: Guilford Publications. Fourth edition (November 4, 2015).
- Knoll, M., Neves, P., Schyns, B., & Meyer, B. (2021). A multilevel approach to direct and indirect relationships between organizational voice climate, team manager openness, implicit voice theories, and silence. *Applied Psychology*, 70(2), 606–642. <https://doi.org/10.1111/apps.12242>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec)*, 11(4), 1–10. <https://doi.org/10.4018/ijec.2015100101>
- Kopaneva, I. M. (2021). Discursive strategies of organizational identity formation in benefit corporations: Coping with a meanings void and assimilating external feedback. *Western Journal of Communication*, 85(1), 22–41. <https://doi.org/10.1080/10570314.2020.1756396>
- Kwak, W. J., & Shim, J. H. (2017). Effects of Machiavellian ethical leadership and employee power distance on employee voice. *Social Behavior and Personality: An International Journal*, 45(9), 1485–1498. <https://doi.org/10.2224/sbp.5896>
- Lee, D., Choi, Y., Youn, S., & Chun, J. U. (2017). Ethical leadership and employee moral voice: The mediating role of moral efficacy and the moderating role of leader–follower value congruence. *Journal of Business Ethics*, 141(1), 47–57. <https://doi.org/10.1007/s10551-015-2689-y>
- Lemoine, G. J., Hartnell, C. A., & Leroy, H. (2019). Taking stock of moral approaches to leadership: An integrative review of ethical, authentic, and servant leadership. *Academy of Management Annals*, 13(1), 148–187. <https://doi.org/10.5465/annals.2016.0121>
- Li, R. Y. M., Tang, B., & Chau, K. W. (2019). Sustainable construction safety knowledge sharing: A partial least square-structural equation modeling and a feedforward neural network approach. *Sustainability*, 11(20), 5831.
- Li, X. (2022). Linking ethical leadership to employee voice and employee silence: investigations of causality and underlying mechanisms Macquarie University. Department of Psychology Sydney, Australia. This thesis is submitted for the degree of Doctor of Philosophy
- Liu, N.-T., Chen, S.-C., & Lee, W.-C. (2022). How does moral identity promote employee voice behavior? The roles of work engagement and leader secure-base support. *Ethics & Behavior*, 32(5), 449–467. <https://doi.org/10.1080/10508422.2021.1923498>
- Madhoshi, M., & Kia Kojouri, K. (2018). Identifying barriers to open innovation in universities. *Journal of Research on Management of Teaching in Marine Sciences*, 4(4), 1–15.
- Maina, J. K. (2022). Parenting as an antecedent to ethical leadership: A review of literature. *Journal of Human Resource & Leadership*, 6(1), 80–97. <https://doi.org/10.53819/81018102t2051>
- Maynes, T. D., & Podsakoff, P. M. (2014). Speaking more broadly: an examination of the nature, antecedents, and consequences of an expanded set of employee voice behaviors. *Journal of applied psychology*, 99(1), 87.
- Miller, V. D., Allen, M., Casey, M. K., & Johnson, J. R. (2000). Reconsidering the organizational identification questionnaire. *Management communication quarterly*, 13(4), 626–658.
- Morrison, E. W. (2014). Employee voice and silence. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 173–197. <https://doi.org/10.1146/annurev-orgpsych-031413-091328>
- Natividade, J. D., Ferreira, F. A., Zopounidis, C., Pereira, L. F., Çipi, A., & Ferreira, J. J. (2021). Developing a composite index for intrapreneurial orientation in small and medium-sized enterprises: A comprehensive dual methodology. *Journal of the Operational Research Society*, 72(7), 1674–1687. <https://doi.org/10.1080/01605682.2020.1730715>
- NawzadSabir, M., Othman, B., Kake, F. A., & Rashid, W. (2019). The influence of entrepreneurship characteristics on attitudes towards knowledge commercialization. *International Journal of Psychosocial Rehabilitation*, 23(02), 566–582.
- Newman, A., Allen, B., & Miao, Q. (2015). I can see clearly now: The moderating effects of role clarity on subordinate responses to ethical leadership. *Personnel Review*, 44(4), 611–628. <https://doi.org/10.1108/PR-11-2013-0200>
- Ng, T. W., & Feldman, D. C. (2012). Employee voice behavior: A meta-analytic test of the conservation of resources framework. *Journal of Organizational Behavior*, 33(2), 216–234. <https://doi.org/10.1002/job.754>
- Northouse, P. G. (2016). *Leadership: Theory and practice* (7th ed.). Thousand Oaks, CA: Sage. 185, 91–94. Book review. College of Education University of Saskatchewan.

- Ogunfowora, B., Maerz, A., & Varty, C. T. (2021). How do leaders foster morally courageous behavior in employees? Leader role modeling, moral ownership, and felt obligation. *Journal of Organizational Behavior*, 42(4), 483–503. <https://doi.org/10.1002/job.2508>
- Peng, H., & Wei, F. (2020). How and when does leader behavioral integrity influence employee voice? The roles of team independence climate and corporate ethical values. *Journal of Business Ethics*, 166(3), 505–521. <https://doi.org/10.1007/s10551-019-04114-x>
- Qi, Y., & Ming-Xia, L. (2014). Ethical leadership, organizational identification and employee voice: Examining moderated mediation process in the Chinese insurance industry. *Asia Pacific Business Review*, 20(2), 231–248. <https://doi.org/10.1080/13602381.2013.823712>
- Qian, Y., & Jian, G. (2020). Ethical leadership and organizational cynicism: The mediating role of leader-member exchange and organizational identification. *Corporate Communications: An International Journal*, 25(2), 207–226. <https://doi.org/10.1108/CCIJ-06-2019-0069>
- Rasheed, M. A., Shahzad, K., Conroy, C., Nadeem, S., & Siddique, M. U. (2017). Exploring the role of employee voice between high-performance work system and organizational innovation in small and medium enterprises. *Journal of Small Business and Enterprise Development*, 24(4), 670–688. <https://doi.org/10.1108/JSBED-11-2016-0185>
- Salamzadeh, A., Tajpour, M., Hosseini, E., & Salembrahmi, M. (2021). Human capital and the performance of Iranian Digital Startups: The moderating role of knowledge sharing behaviour. *International Journal of Public Sector Performance Management*, 2(1), 12944.
- Shakeel, F., Kruyen, P. M., & Van Thiel, S. (2019). Ethical leadership as process: A conceptual proposition. *Public Integrity*, 21(6), 613–624. <https://doi.org/10.1080/10999922.2019.1606544>
- Sharma, A., Agrawal, R., & Khandelwal, U. (2019). Developing ethical leadership for business organizations: A conceptual model of its antecedents and consequences. *Leadership & Organization Development Journal*, 40(6), 712–734. <https://doi.org/10.1108/LODJ-10-2018-0367>
- Sharma, R. R., & Pardasani, R. (2021). Sustainability Mindset Through Ethical Leadership and CAMB Competencies. In: Ritz, A.A., Rimanoczy, I. (eds) *Sustainability Mindset and Transformative Leadership. Sustainable Development Goals Series*. Palgrave Macmillan, Cham, 141–155. [https://doi.org/10.1007/978-3-030-76069-4\\_7](https://doi.org/10.1007/978-3-030-76069-4_7)
- Stone, M. (1977). An asymptotic equivalence of choice of model by cross-validation and Akaike's criterion. *Journal of the Royal Statistical Society: Series B (Methodological)*, 39(1), 44–47.
- Tajpour, M., Hosseini, E., & Mohiuddin, M. (2023). Effects of innovative climate, knowledge sharing, and communication on sustainability of digital start-ups: Does social media matter? *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2), 1–13. <https://doi.org/10.1016/j.joitmc.2023.100053>
- Thiensiri, P. (2021). Vital role of leader as employee value proposition for employee engagement in Thai perspective. *Kasetsart Journal of Social Sciences*, 42(3), 489–494.
- Thi-Minh-Ngoc Luu, V.-D., & Pham, T.-T.-N.N. (2020). Ethical leadership supports voice behavior: Evidence from Vietnamese service firms. *Journal of Business and Economic Development*, 5(2), 90.
- Thomas, R. M. (2003). *Blending qualitative and quantitative research methods in theses and dissertations*. Corwin press. Sage, California, USA. <https://doi.org/10.4135/9781412983525>
- Trevino, L. K., Hartman, L. P., & Brown, M. (2000). Moral person and moral manager: How executives develop a reputation for ethical leadership. *California Management Review*, 42(4), 128–142. <https://doi.org/10.2307/41166057>
- Tyler, T. R., & Smith, H. J. (2014). Justice, social identity, and group processes. In *The psychology of the social self* (pp. 223–264). Psychology Press. Second Edition, New York. <https://doi.org/10.4324/9781315805689>
- Tyler, T., & Blader, S. (2013). *Cooperation in groups: Procedural justice, social identity, and behavioral engagement*. Routledge.
- Ullah, I., Kayani, N. Z., & Mahmood, A. (2020). Fostering innovative performance through ethical leadership: Examining the mediating role of employee voice. *European Journal of International Management*, 14(4), 672–692.
- Ullah, I., Mirza, B., & Jamil, A. (2021). The influence of ethical leadership on innovative performance: Modeling the mediating role of intellectual capital. *Journal of Management Development*, 40(4), 273–292. <https://doi.org/10.1108/JMD-08-2020-0277>
- Van Knippenberg, D. (2011). Embodying who we are: Leader group prototypicality and leadership effectiveness. *The Leadership Quarterly*, 22(6), 1078–1091. <https://doi.org/10.1016/j.leaqua.2011.09.004>
- Walumbwa, F. O., & Schaubroeck, J. (2009). Leader personality traits and employee voice behavior: mediating roles of ethical leadership and work group psychological safety. *Journal of Applied Psychology*, 94(5), 1275–1286. <https://psycnet.apa.org/doi/10.1037/a0015848>



- Wang, H., & Yen, Y. (2021). How the organizational ethical climate accounts for employee voice behavior: A multilevel analysis. *Asia Pacific Journal of Human Resources*. <https://doi.org/10.1111/1744-7941.12315>
- Watson, C. E., Johanson, M., Loder, M., & Dankiw, J. (2014). Effects of high-stakes testing on third through fifth grade students: Student voices and concerns for educational leaders. *Journal of Organizational Learning and Leadership*, 12(1), 1–11.
- Weiss, M., Kolbe, M., Grote, G., Spahn, D. R., & Grande, B. (2018). We can do it! Inclusive leader language promotes voice behavior in multi-professional teams. *The Leadership Quarterly*, 29(3), 389–402. <https://doi.org/10.1016/j.leaqua.2017.09.002>
- Wu, W., Tang, F., Dong, X., & Liu, C. (2015). Different identifications cause different types of voice: A role identity approach to the relations between organizational socialization and voice. *Asia Pacific Journal of Management*, 32(1), 251–287. <https://doi.org/10.1007/s10490-014-9384-x>
- Yadav, R. S., & Singh, M. (2016). Winning the 'trust' of the employees, ethically or strategically? *International Journal of Business Governance and Ethics*, 11(3), 223–242.
- Zagenczyk, T. J., Purvis, R. L., Cruz, K. S., Thoroughgood, C. N., & Sawyer, K. B. (2021). Context and social exchange: Perceived ethical climate strengthens the relationships between perceived organizational support and organizational identification and commitment. *The International Journal of Human Resource Management*, 32(22), 4752–4771. <https://doi.org/10.1080/09585192.2019.1706618>
- Zhu, W., Zheng, X., He, H., Wang, G., & Zhang, X. (2019). Ethical leadership with both “moral person” and “moral manager” aspects: Scale development and cross-cultural validation. *Journal of Business Ethics*, 158(2), 547–565. <https://doi.org/10.1007/s10551-017-3740-y>
- Zhuang, W.-L., Lee, C.-H., & Ma, C.-L. (2021). Hotel employees' voice behavior: The role of paternalistic leadership and organizational identification. *Sustainability*, 14(1), 256. <https://doi.org/10.3390/su14010256>

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