

Retention in the IT industry: exploring the mediating role of knowledge-sharing in the relationship between authentic leadership style and employee turnover

Amra Džambić

*Department of Management, International Burch University,
Sarajevo, Bosnia and Herzegovina, and*

Nereida Hadziahmetovic

Berlin School of Business and Innovation, Berlin, Germany

Abstract

Purpose – This study investigates the influence of authentic leadership on employee turnover intentions within the IT sector and focuses specifically on the mediating role of knowledge-sharing. The research addresses the growing need for leadership practices that enhance retention in the dynamic IT industry of Southeast Europe, particularly in Bosnia, Croatia, Serbia and Montenegro.

Design/methodology/approach – We employed a quantitative research design utilizing an online survey to gather data from IT professionals across the selected countries. We measured authentic leadership, knowledge sharing, and turnover intentions using a five-point Likert scale. We conducted data analysis using structural equation modeling (SEM), with both confirmatory factor analysis (CFA) and reliability assessments (Cronbach's alpha). We evaluated key model fit indices, i.e. χ^2/df , RMSEA, GFI and CFI, to ensure robustness despite a *p*-value anomaly.

Findings – The results reveal that authentic leadership significantly reduces employee turnover by promoting knowledge-sharing within organizations. Although the direct relationship between knowledge-sharing and turnover was not statistically significant, authentic leadership emerged as a critical factor influencing retention. The SEM analysis confirmed the model's validity with adequate fit indices, highlighting the relevance of leadership practices in reducing turnover in the IT sector.

Research limitations/implications – The study encourages IT organizations to integrate authentic leadership practices to improve retention rates. Leaders who exhibit transparency, relational integrity and balanced decision-making foster trust and knowledge-sharing among employees, which in turn supports organizational stability. Policymakers and HR practitioners should develop programs that promote authentic leadership, emphasizing leadership development tailored to the needs of the IT workforce in emerging economies.

Originality/value – This study contributes to the growing body of literature on leadership and employee retention by focusing on authentic leadership to mitigate turnover. It offers practical insights relevant to the IT sector, addressing a research gap by providing evidence from Southeast Europe. By examining how leadership influences knowledge-sharing and employee retention, the study bridges the gap between theory and practice, offering actionable recommendations for IT managers and policymakers.

Keywords Authentic leadership, Turnover, IT sector, Knowledge-sharing

Paper type Research paper

Introduction

The article aims to investigate the relationship between leadership style and turnover intentions. In particular, it aims to investigate the mediation effect of knowledge-sharing on the



relationship between leadership style and turnover intentions. Over the past few decades, numerous studies have examined the variables that affect employees' decisions to leave their jobs (Allen, Shore, & Griffeth, 2003; Shaw, Duffy, Johnson, & Lockhart, 2005; Hancock, Allen, Bosco, McDaniel, & Pierce, 2013). No matter how big or small, every company has a system for monitoring its finances. Businesses are always seeking new methods to reduce expenses. The cost of employee turnover constitutes a frequently disregarded aspect. The largest difficulty ahead of the IT industry is not finding new workers but keeping the talent they already have because of excessive turnover. The IT industry has experienced tremendous growth worldwide in the past several years. Southeast Europe, including Bosnia, Croatia, Serbia, and Montenegro, faces distinct challenges compared to more developed European markets. While these countries have seen rapid digitalization, their IT professionals often grapple with wage disparities, fewer opportunities for career advancement, and high turnover rates as they search for better prospects abroad or in more competitive markets. Employee retention is especially critical in the tech industry due to the high costs associated with turnover – such as lost productivity, missed project deadlines, and diminished innovation potential – making effective leadership crucial to stabilizing the workforce (Masood, 2024). Moreover, technological changes and hybrid work models have intensified the need for leadership styles that foster job satisfaction and trust among employees, with work-life balance emerging as a key retention determinant (Sheshadri, Vallabhaneni, & Malhotra, 2024).

Despite the global importance of leadership in IT retention, few studies have explored how authentic leadership, a style rooted in integrity, transparency, and relational trust, can mitigate turnover in these specific emerging markets. We aimed to fill this gap by investigating the role of authentic leadership in promoting knowledge-sharing and reducing turnover. Focusing on IT professionals in Southeast Europe, this research offers practical insights for regional organizations and contributes to the broader understanding of leadership's impact in managing employee retention effectively (Korn Ferry, 2021; Sheshadri *et al.*, 2024).

The greatest problem for practitioners in this area has been retaining the ambitious and transient staff. Moreover, this has brought significant human resource challenges. The costs of leaving IT experts for the organization are high, given the high investments in their attraction, employment, development, and training (Randhawa, 2007; Haider *et al.*, 2015).

High turnover is a significant problem in information technology (IT) firms. In today's rapidly evolving and competitive business landscape, effective leadership is crucial in shaping organizational success and employee outcomes, particularly in the information technology (IT) sector. The IT industry is known for human capital and innovation being key resources. Therefore, understanding the impact of leadership styles on employee outcomes becomes even more crucial in this context. Employees may leave a company if they do not believe leadership fosters a stable work environment.

The IT sector in the Balkans is at a critical juncture. While the industry shows great potential, retaining talent is essential for sustainable growth. Leadership is decisive in shaping work environments that reduce turnover and promote innovation. By aligning leadership practices with employee needs, companies can mitigate the risks of talent loss and strengthen their position in the global tech landscape (Western Balkans Regular Economic Report, n.d.).

The IT sectors in Bosnia and Herzegovina, Serbia, Croatia, and Montenegro are on a growth trajectory, with each country seeking to establish a foothold in the competitive global tech landscape, albeit facing distinct challenges. Bosnia and Herzegovina's IT industry, largely centered around outsourcing for international clients, faces constraints due to a limited local talent pool and a high rate of skilled workers migrating for better pay. Serbia's IT sector is one of the strongest in the region, bolstered by governmental initiatives to support digital transformation. Nevertheless, it too grapples with turnover as professionals increasingly seek remote work with international firms. Croatia has developed into a notable IT hub with artificial intelligence and cybersecurity strengths. It benefits from foreign investment and a strong educational foundation. However, its skilled workforce frequently transitions to roles abroad or remote positions for higher salaries. While smaller and less developed in IT,

Montenegro is witnessing a gradual push toward digitalization and aims to retain its talent base through government support and emerging opportunities. High turnover across the region underscores the pressing need for improved working conditions, competitive compensation, and robust leadership. The role of authentic leadership is particularly relevant, as leaders who foster transparent, ethical, and supportive environments may better retain skilled professionals and thus create stable growth for the IT sectors across these Balkan countries (Đekić, Đuric, & Simi, 2024).

Understandably, over 1,000 studies exist on this subject, and we expect the research to continue for some time. This results from the fact that turnover has been a persistent issue throughout the twentieth century and persists today (Shaw *et al.*, 2005; Amankwaa & Anku-Tsede, 2015; Azanza, Moriano, Molero, & Lévy Mangin, 2015).

The fact that turnover is costly and harmful causes the prevailing interests (Bi, 2016). According to prior studies, authentic leadership is one of the most crucial elements in reducing employee turnover (Bass & Bass Bernard, 1985). The primary determinant of a company's success or failure is the style of the employed leadership. The literature defines a leader as someone who inspires, convinces, and guides a person or team to effectively pursue the organization's objectives (Avolio & Gardner, 2005).

In the information technology (IT) industry of the countries Croatia, Bosnia and Herzegovina, Montenegro, and Serbia, this study seeks to investigate the relationship between leadership styles, particularly authentic leadership, significant turnover factors, and the mediating role of knowledge-sharing between leadership styles and turnover. The IT sector is one of the fastest-growing industries in Bosnia and Herzegovina country and has seen substantial expansion in recent years. However, this expansion brought obstacles, such as the need to cultivate a creative and inventive workplace and high staff turnover. Comprehensive research that addresses these problems in the unique settings of these countries is lacking in the literature. The findings of this study will contribute to the existing knowledge on effective leadership practices in the IT sector and offer practical implications for organizations in their efforts to optimize employee turnover and promote knowledge-sharing. The study contributed to how leaders might prevent followers from turning their intentions into turnover behavior. According to recent studies (Waldman, Carter, & Hom, 2015), pull-to-stay factors like job embeddedness lower turnover and stop "shocks" from developing into quitting behavior (Winton, Whittington, & Meskelis, 2022).

Authentic leadership is particularly well-suited for studying IT professionals due to its emphasis on transparency, ethical behavior, and relationship-building, which align with the needs and challenges of the IT industry. In a sector where rapid change, innovation, and complex problem-solving are critical, authentic leaders foster a supportive environment that encourages open communication and knowledge-sharing. Authentic leadership focuses on self-awareness, relational transparency, and consistency with one's values, which are crucial for establishing trust and collaboration in teams, especially when tasks are interdependent and specialized, as in IT (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). Furthermore, IT professionals often experience high stress due to demanding project deadlines and constant technological advancements. Scholars have linked authentic leadership to improved employee well-being and job satisfaction, which can help mitigate burnout and turnover in high-pressure environments (Gardner, Avolio, Luthans, May, & Walumbwa, 2005). By fostering an ethical and transparent culture, authentic leadership helps build a sense of purpose and engagement, which are particularly effective for retaining skilled IT professionals and enhancing team performance in a field where retaining talent is challenging (Gu, Nawaz, Abbas, & Lv, 2024).

The costs of losing key employees have escalated in today's business environment, marked by rapid technological advancements and constant market shifts. Knowledge and skills have become more specialized, and the tacit knowledge that departs with employees can significantly impair a firm's innovative capabilities and responsiveness to market demands (Dess & Shaw, 2001). Thus, exploring how authentic leadership can influence knowledge-

sharing, and thereby potentially mitigate turnover is not only of theoretical interest but of strategic business importance.

By investigating these relationships, the current study seeks to contribute a nuanced understanding of how authentic leadership can foster a knowledge-rich environment that discourages turnover and equips practitioners with actionable insights. Thus, we can understand effective leadership not in isolation but as a crucial driver in a complex system where knowledge management and turnover are critical variables affecting an organization's agility and robustness in today's volatile business environment.

This research aims to increase the general understanding of the impact of the leadership style on an employee turnover intention and deepen understanding of the mediation effect of knowledge-sharing. We formulated the following research questions:

- (1) How does authentic leadership style influence employee turnover intentions in the IT sector of Croatia, Bosnia and Herzegovina, Montenegro, and Serbia?
- (2) What role does knowledge-sharing play in mediating the relationship between authentic leadership and turnover intentions among IT professionals in these countries?
- (3) To what extent can the introduction of authentic styles reduce employee turnover in the IT industry in a rapidly changing business environment?
- (4) How do leadership-driven knowledge-sharing practices influence the overall retention rates of IT professionals in emerging markets?

Literature review and hypothesis development

Leadership styles and turnover

Leadership is essential to employees' work attitudes since these attitudes greatly impact an organization's performance, effectiveness, and behavioral results. The capacity and choice to stay with a certain organization significantly influence a business's effectiveness and workforce stability. According to [Ausar, Kang, and Kim \(2016\)](#) who support this claim, leadership is an essential management tool because, when utilized effectively, it can improve employee relations, beneficially impact the workplace environment, boost service quality, and change behavioral outcomes. The discipline of leadership study has been the subject of numerous publications created by researchers throughout the years ([Avolio, Gardner, Walumbwa, Luthans, & May, 2004](#); [Bass & Riggio, 2006](#); [Tse, 2008](#); [Chi & Pan, 2012](#)). According to [Yukl \(1989\)](#), leadership is a process that enables individuals and groups to work together to achieve common goals. It is also a process that determines what should be done and how it should be done to effectively influence others. Authentic leaders exhibit high ethical standards and integrity, prioritizing the well-being of others, which fosters trust between leaders and their followers. The authenticity of these leaders strengthens employee trust as they align their actions with their core beliefs and values. [Baquero \(2023\)](#) investigating the factors that influence employees' decisions to leave their employer is at the heart of studies on employee turnover. Scholars have proposed numerous theoretical models to understand the complex nature of employees' decision-making processes ([Tse, 2008](#)). Researchers have proven that authentic leadership can significantly reduce organizational turnover. According to authentic leadership theory, this leadership style fosters trust between leaders and followers ([Gardner et al., 2005](#)) and promotes the positive development of followers ([Luthans & Avolio, 2003](#)). Consequently, it is reasonable to assume that authentic leadership is inversely related to employees' turnover intentions. [Avolio et al. \(2004\)](#) theorized that authentic leadership shapes employees' attitudes and behaviors. This suggests that authentic leaders inspire positive attitudes, such as organizational commitment and engagement, by nurturing psychological factors like trust, optimism, and positive emotions. Moreover, scholars believe that authentic

leadership enhances employee retention (Avolio & Gardner, 2005; Wong & Cummings, 2009; Pillay, Scheepers, & Diesel, 2024).

Employee retention strategies increasingly emphasize authentic leadership demonstrated by leaders' sincere, moral, and open conduct. According to previous studies, authentic leadership increases employee creativity, minimizes turnover intention, fosters knowledge-sharing, reduces emotional weariness, and increases organizational engagement (Laschinger, Wong, & Grau, 2013).

According to Avolio and Gardner (2005), Gardner *et al.* (2005), and Walumbwa *et al.* (2008), authentic leadership is an essential aspect of positive leadership styles necessary for fostering trust and positive work environments, which are crucial for employee retention. According to Walumbwa *et al.* (2008), authentic leadership involves a set of behaviors that not only draw on but also enhance positive psychological abilities and create an ethical climate. This form of leadership encourages increased self-awareness, an ingrained moral outlook, balanced information processing, and openness in relationships with followers, which supports positive self-development.

Neider and Schriesheim (2011) found that authentic leadership negatively affects employees' turnover intentions. Authentic leaders who exhibited transparency and sincerity in their actions and decisions were associated with lower employee turnover intentions. Authentic leaders tend to address conflicts openly and constructively. Hoch, Bommer, Dulebohn, and Wu (2018) found that authentic leadership was associated with lower turnover intentions through its positive impact on conflict resolution. Leaders effectively managing conflicts can reduce workplace tensions and the desire to leave the organization.

Based on the above-mentioned evidence from previous literature, we hypothesized:

H1. Leadership style has a positive impact on turnover intention.

Knowledge sharing intention, leadership style, and turnover

The literature refers to a leader's strategy or method of leading their group or organization as their leadership style. Among the most frequently used styles, we may distinguish the authentic, transactional, laissez-faire, autocratic, democratic, and other leadership philosophies. Each style has distinctive traits and can affect employees' attitudes and behavior differently. The process by which staff members share knowledge, skills, and experiences inside the company. Effective knowledge-sharing can result in improved decision-making, problem-solving, and creativity inside the organization. Employee turnover is the frequency with which workers depart a company, either freely (via resignation) or involuntarily (by termination). For businesses, a high turnover rate can be expensive and disruptive. Studies frequently link higher levels of information sharing to lower turnover intentions and actual turnover rates. Hislop (2003), who reviewed a sizable number of studies in knowledge management, noted that we can generally categorize the majority of these studies as "exploratory studies" and that they have a limited empirical basis, which highlights the lack of depth in contemporary understanding of how human and social factors influence knowledge management and sharing initiatives. The economic advantages of knowledge-sharing, such as being competitive, have received the majority of attention to date. Knowledge sharing as a psychological need of people has not been the subject of a great deal of research (Asgar, Barbera, Rasool, Seitamaa-Hakkarainen, & Mohelská, 2022).

Researchers (Walumbwa *et al.*, 2008) highlight that authentic leaders deeply understand how to effectively leverage their strengths and abilities and how their decisions impact their followers. Relational transparency is key to authentic leadership, which refers to building genuine relationships with followers by sharing information openly and sincerely. Another important dimension is the *internalized moral perspective*; authentic leaders base their actions on moral convictions, prioritizing the group's interests, even when they conflict with their own (Avolio & Gardner, 2005). The fourth dimension, *balanced processing*, involves authentic

leaders objectively considering different perspectives and analyzing conflicting opinions without distorting information (Tice & Wallace, 2003).

Empirical research indicates that leadership traits such as fairness, open communication, well-being, and thoughtful decision-making are positively associated with employees' cooperative behavior and willingness to share knowledge (Baquero, 2023).

Implicit or tacit information, which lies in the minds, cultures, and experiences within the organization, and explicit knowledge, which may be documented and communicated, are two prevalent categories of organizational knowledge (Meso & Smith, 2000). Knowledge that is implicit or tacit encompasses personnel's expertise, experience, and abilities. Extracting value from knowledge is largely managed as part of tacit knowledge management. This closely relates to education, cultural creation, training, and knowledge-sharing. Tacit knowledge typically falls under the categories of subjective, cognitive, and experiential learning (Nonaka & Peltokorpi, 2006). The link between knowledge-sharing and plans to turnover does not have any scientific support. This is mostly because information sharing is not a well-developed empirical construct (Hislop, 2003). Trust and the sense of belonging that authentic leaders cultivate largely mediate the relationship between authentic leadership and knowledge-sharing. Employees who perceive their leaders as trustworthy and ethical are more willing to contribute to a collaborative environment (Amber, Qazi, Javaid, Khan, & Ahmad, 2021).

Moreover, authentic leaders model knowledge-sharing behaviors and reinforce the idea that learning and development are collective responsibilities. In turn, this can enhance organizational learning, innovation, and adaptability, especially in knowledge-intensive sectors like IT, where retaining institutional knowledge is critical. Consequently, organizations with authentic leadership practices are better positioned to leverage their employees' knowledge as a competitive advantage while simultaneously reducing turnover by creating a supportive and cohesive workplace culture (Jun *et al.*, 2024). Authentic leadership encourages knowledge-sharing behaviors by cultivating an innovative climate and fostering employee identification. This leadership approach positively correlates with knowledge-sharing behaviors, particularly when an innovative climate and personal identification act as partial mediators (Sharif, Albadry, Durrani, & Shahbaz, 2023). Empirical research indicates that leaders' behavior traits, attention to well-being, fairness in decision-making, and open communication are positively associated with employees' cooperative behaviors and knowledge-sharing (Zeb, Abdullah, Hussain, & Safi, 2020).

Based on the above-mentioned evidence from previous literature, we hypothesized:

H2. Knowledge sharing mediates the relationship between leadership style and turnover.

H3. Knowledge sharing has a positive impact on turnover.

As illustrated in Figure 1, the proposed research model examines the influence of authentic leadership on turnover intention, with knowledge sharing as a mediating variable.

Model

The following diagram represents the research model of the study.

Research methodology

Research design

We adopted a quantitative research method to investigate the influence of leadership style and turnover, focusing on the mediating role of knowledge-sharing. The primary tool for data collection was an online questionnaire designed to test the proposed hypotheses derived from the literature review. We explored the relationship between authentic leadership styles and employee turnover, mediated by knowledge-sharing, within the IT sector of Bosnia, Croatia, Serbia, and Montenegro.

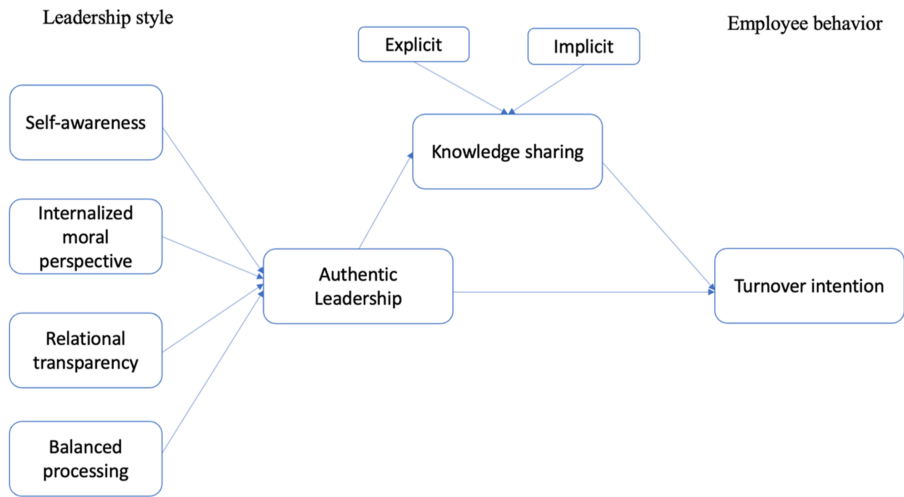


Figure 1. Research model. Source: Authors' own elaboration

This study utilized an online questionnaire to collect data and measure key constructs such as authentic leadership, knowledge-sharing, and employee turnover intentions. We assessed each construct using a 5-point Likert scale, where respondents rated their agreement with statements from 1 (strongly disagree) to 5 (strongly agree). We slightly adapted the questions to the Bosnian language, considering the linguistic similarities across Bosnia, Croatia, Serbia, and Montenegro. This ensured clarity and consistency across the surveyed regions.

We operationalized the constructs of authentic leadership, knowledge-sharing, and turnover as follows. We measured authentic leadership based on four dimensions: self-awareness, internalized moral perspective, balanced processing, and relational transparency. These dimensions are consistent with the theoretical framework by [Walumbwa et al. \(2008\)](#), which subsequent studies have validated (e.g. [Gardner, Cogliser, Davis, & Dickens, 2011](#)). We divided knowledge-sharing into two dimensions, i.e. explicit knowledge-sharing and implicit knowledge-sharing. This classification followed the distinctions by [Ikujiro Nonaka, Takeuchi, and Umemoto \(1996\)](#) from their seminal work on organizational knowledge creation. Finally, we assessed turnover by employees' expressed intentions to leave their current positions, following the approach by [Tett and Meyer \(1993\)](#).

We measured authentic leadership using a 16-item scale based on four key dimensions outlined by [Walumbwa et al. \(2008\)](#), i.e. *self-awareness*, *internalized moral perspective*, *balanced processing*, and *relational transparency*. Each dimension captures essential qualities of authentic leadership. *Self-awareness* refers to a leader's understanding of their strengths, weaknesses, and emotions, with sample statements like, "My leader is aware of how their actions affect others." *Internalized moral perspective* reflects alignment between a leader's behavior and their values, shown in statements such as, "My leader acts consistently with their personal values." *Balanced processing* involves a leader's objective evaluation of feedback and multiple perspectives, and includes sample questions like, "My leader seeks feedback that challenges their views." Finally, *relational transparency* emphasizes openness and honesty in relationships with followers, exemplified by statements like, "My leader encourages open communication." This construct demonstrated excellent internal consistency, with a Cronbach's alpha of 0.948.

We measured the knowledge-sharing construct, adapted from [Nonaka et al. \(1996\)](#), using four items that capture *explicit* and *implicit knowledge-sharing*. *Explicit knowledge-sharing*

refers to exchanging documented information, such as reports or manuals, with items like, “I regularly share reports and documents that can help my team.” *Implicit knowledge-sharing* focuses on transferring personal insights and expertise, measured by statements such as, “I frequently offer advice to colleagues based on my experience.” This construct also demonstrated high reliability with a Cronbach’s alpha of 0.853.

Finally, we measured turnover intentions using a five-item scale based on [Tett and Meyer \(1993\)](#), assessing the frequency with which employees consider leaving their current position. Sample items included statements like, “I have been thinking about leaving my current organization in the near future.” The construct demonstrated exceptional reliability, with a Cronbach’s alpha of 0.980, reflecting high consistency across items. We measured the questionnaire items for each construct using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), following the recommendations of [Lindell and Whitney \(2001\)](#).

We analyzed the collected data using SPSS version 18 for preliminary analyses and AMOS version 24 for structural equation modeling (SEM). The analysis followed these steps. (1) Exploratory factor analysis (EFA) conducted to explore the underlying factor structure of the questionnaire items and to ensure the validity of the constructs. (2) Confirmatory factor analysis (CFA) performed to confirm the factor structure identified by EFA and to assess the measurement model’s reliability and validity. (3) Structural equation modeling (SEM) was used to test the proposed hypotheses and examine the direct and indirect effects of authentic leadership on turnover, with knowledge-sharing as a mediating variable.

Sampling and data collection

According to available data, around 1,100 IT companies are registered in Bosnia and Herzegovina, employing approximately 9,000 workers. In Croatia, as of 2020, the number of IT companies was 5,707, representing 4.1% of the total number of businesses in the country. The average number of employees per IT company in Bosnia and Herzegovina is about 8.2. In Croatia, according to 2021 data, the average number of employees in IT companies was 5.21, with 1,574 companies having no employees and only 529 companies employing about 10 workers ([PN Analiza: Top 100 Najvećih IT Kompanija Po Prihodu u BiH – Poslovne Novine, n.d.](#)). According to available data, in 2022, there were 715 IT companies registered in Montenegro, employing 3,434 workers.

This research successfully gathered responses from 125 participants after contacting a total of 350 companies. However, several factors influenced the overall response rate. Many IT companies in this region operate as closed, private entities, often cautious about sharing internal information, especially in research surveys. The driver behind this reluctance is typically a desire to protect competitive insights, intellectual property, and the confidentiality of business practices.

Moreover, feedback from initial outreach efforts indicated that employees are often hesitant to participate in surveys of this nature. Some may feel apprehensive about discussing workplace conditions or internal company matters, while others may lack the time or motivation to engage in non-mandatory research activities. These factors, combined with the naturally selective participation of IT companies, create a unique challenge for obtaining a fully representative sample.

Despite these limitations, the base of 125 participant responses provides valuable insights into the sector. By acknowledging these barriers, this research presents findings that, although shaped by the realities of the industry’s closed culture, still significantly contribute to understanding the IT sector in this region.

The sample for this study comprises professionals working in the IT sector across Bosnia and Herzegovina, Croatia, Serbia, and Montenegro. We chose this region for its shared or similar linguistic and cultural background, which facilitated the survey process. Given that these countries predominantly use mutually intelligible languages, we needed minimal

adaptation for the questionnaire. This linguistic similarity ensured that respondents clearly understood questions across the different countries, reducing the risk of misinterpretation and enhancing the responses' consistency.

We used a convenience sampling method to reach participants efficiently and effectively. We distributed the online questionnaire through various professional networks, including LinkedIn, industry-specific forums, and social media platforms, which IT professionals in these countries commonly utilize. This approach allowed us to target respondents actively involved in IT, making the sample relevant to the study's focus on leadership styles, knowledge-sharing, and turnover intentions within this rapidly evolving sector.

To ensure a diverse and representative sample, outreach included various subfields within IT, such as software development, network engineering, data science, and IT management. Respondents held a range of job roles and levels of experience, which allowed for a more comprehensive understanding of employee perspectives on leadership and turnover.

Data analysis

Results

We used SPSS and AMOS software to analyze the collected data and test the proposed hypotheses. Out of the total number of respondents, 125 individuals participated in the survey. Of these, 67 respondents (53.6%) were women, while 58 (46.4%) were men. Regarding age distribution, the largest group was those aged 25–34, representing 36.36% of the total. Most respondents, 97.73%, were from Bosnia and Herzegovina, with only a few from other areas.

Most individuals in the sample possessed a bachelor's degree or its equivalent, comprising approximately 42.96% of the total. Those with a high school education followed closely, constituting about 33.33%. Master's degree holders represented the smallest proportion at 23.70%. Regarding their working model, 51.52% worked in an office setting, while 41.67% engaged in a combined or hybrid work model. Job roles were diverse, but the largest categories were administrative, developer, and designer representing 21.21, 19.70, and 16.67% of the workforce, respectively.

- (1) Results of Cronbach's alpha values revealed that factors ranged from 0.853 to 0.980, signifying that all the factors were very reliable. For authentic leadership, Cronbach's alpha value was 0.948, which is extremely high, suggesting that the 16 items consistently measure authentic leadership. The turnover construct had a Cronbach's alpha of 0.980, which is exceptionally high for the five items, indicating that the items are reliable in measuring turnover. A Cronbach's alpha of 0.853 for knowledge-sharing indicated a very good level of internal consistency among the four items used to measure this construct. [Table 2](#) details the items along with their reliability outcomes. Furthermore, we established the validity of these measurements using the AMOS plugin (Hu & Bentler, 1999). The findings analyzed in [Table 2](#) revealed that all constructs demonstrated a composite reliability greater than 0.7, with values ranging between 0.860 and 0.950, affirming their internal consistency.

As shown in [Table 1](#), the majority of respondents held either a bachelor's or master's degree, while one-third had completed high school only.

[Table 2](#) represents the reliability and validity test results of the measurement model.

Specifically, authentic leadership exhibited notable internal consistency with a Cronbach's alpha of 0.860, complemented by a composite reliability (CR) of 0.950, average variance extracted (AVE) of 0.751, and a maximum shared variance (MSV) of 0.351. Similarly, knowledge-sharing displayed a Cronbach's alpha of 0.925, CR of 0.825, AVE of 0.890, and MSV of 0.521. Furthermore, the turnover construct displayed a Cronbach's alpha of 0.950, CR of 0.973, AVE of 0.901, and MSV of 0.502.

Table 1. Educational background of research participants

Education	Number of research participants	Percentage share in research
Bachelor's degree or its equivalent	48	42.96%
Master's degree	32	23.70%
High School	45	33.33%

Note(s): Respondents' education level
Source(s): Authors' own elaboration

Table 2. Reliability and validity test results of the measurement model

Constructs	Source	Reliability Cronbach's alpha	CR	AVE	MSV
Authentic leadership	Hoch et al. (2018)	0.860	0.950	0.751	0.351
Knowledge sharing	Connelly et al. (2019)	0.925	0.825	0.890	0.521
Turnover	Lee et al. (2018)	0.950	0.973	0.901	0.502

Note(s): Reliability (Cronbach alpha) > 0.7, Composite reliability (CR) > 0.7, Average variance extracted (AVE) > 0.5, AVE > MSV
Source(s): Authors' own elaboration

These metrics confirmed the robustness of measurement tools. Moreover, they align closely with previous empirical findings. The research results found support in the theoretical frameworks advanced by [Hoch et al. \(2018\)](#) for authentic leadership, [Connelly, Černe, Dysvik, and Škerlavaj \(2019\)](#) for knowledge-sharing, and [Lee, Hom, Eberly, and Li \(2018\)](#) for turnover.

[Table 3](#) presents the results from an exploratory factor analysis (EFA) conducted using SPSS with maximum likelihood extraction and promax rotation to assess the factor loadings of each item within the constructs of authentic leadership, knowledge-sharing, and turnover. This analysis was instrumental in understanding the underlying dimensions of these constructs.

For authentic leadership, the factor loading range was 0.397 to 0.848, which suggests a moderate to strong relationship between the items and the underlying factor. This range indicates that while most items are well-represented by the factor, some items may be less central to the construct, as suggested by the lower range boundary. This might imply potential areas for refinement in scale items to enhance construct alignment.

Table 3. Exploratory factor analysis (EFA)

Factors	Number of items	Component loading range
Authentic leadership	16	0.397–0.848
Knowledge sharing	5	0.857–0.980
Turnover	5	0.825–0.923

Source(s): Authors' own elaboration

In the case of knowledge-sharing, all item loadings ranged from 0.857 to 0.980, demonstrating a very strong relationship with the factor. This high loading suggests that the items highly represent the construct, affirming the scale's validity for measuring the knowledge-sharing construct.

For the turnover construct, item loadings varied from 0.825 to 0.923, demonstrating a strong relationship with the factor.

According to Hair, Anderson, Tatham, and Black (1998), a factor loading of 0.3 is acceptable for inclusion in a scale. All items across the constructs met this threshold, which supports the robustness of the scales used in the study. However, the analysis suggests a possible review of the authentic leadership scale to optimize its factor structure.

These findings support the construct validity of the measurement scales and suggest areas for further refinement. By confirming that most items strongly represent their respective constructs, the EFA results substantiate the scale's reliability in capturing the essence of authentic leadership, knowledge-sharing, and turnover.

We tested the proposed conceptual model and hypotheses with SEM. Table 4 summarizes CFA results presenting various fit indices to assess the model's adequacy. The p -value of the model was 0, indicating a poor fit as it failed to exceed the acceptable threshold of 0.05, suggesting that the model did not fit well with the data. The Chi-square/df (χ^2/df) value of 2.082 was within the acceptable range of less than 3, indicating an acceptable fit. The goodness-of-fit index (GFI) was 0.933, surpassing the acceptable range of greater than 0.9, thus indicating a good fit. Similarly, the comparative fit index (CFI) and incremental fit index (IFI) registered values of 0.969, which were well above the minimum acceptable value of 0.9, reflecting an excellent fit. The Tucker–Lewis index (TLI) showed a value of 0.962, also within the acceptable range, indicating a very good fit. The root-mean-square error of approximation (RMSEA) was 0.046, which is less than the threshold of 0.05, signifying a good fit. Lastly, the normed fit index (NFI) value of 0.942 was above the acceptable limit of 0.9, indicating a good fit.

In SEM, model fit evaluation relies on multiple indices rather than solely on the p -value, a single fit indicator. As Hu and Bentler (1999) note, it is a standard practice to assess models through a combination of fit indices for a more comprehensive understanding of model adequacy. Following this approach, our study included several key fit indices, i.e. CFI, TLI, GFI and RMSEA, each of which fell within acceptable ranges, strongly supporting the model's validity (Barrett, 2007).

In our results, the GFI was 0.933, comfortably above the threshold of 0.9, indicating that the model captures the observed data's variance and covariance well. Similarly, at 0.969, the CFI surpassed the 0.9 standard, indicating an excellent fit and affirming that the model significantly improves on a baseline without hypothesized relationships. The TLI also supported the

Table 4. CFA analysis

Fit indices	Acceptable range	Measured values
p -value of the model	>0.05	0
Chi-square/df (χ^2/df)	<3	2.082
Goodness-of-fit (GFI)	>0.9	0.933
Comparative fit index (CFI)	>0.9	0.969
Tucker-Lewis index (TLI)	>0.9	0.962
Root means-square error of approximation (RMSEA)	>0.05	0.046
Incremental fit index (IFI)	>0.9	0.969
Normed fit index (NFI)	>0.9	0.94

Source(s): Authors' own elaboration

model’s quality, scoring 0.962, which exceeded the 0.9 threshold, reflecting that the model was both parsimonious and accurate, as it penalizes additional parameters.

The RMSEA is particularly noteworthy, measuring at 0.046, below the 0.05 threshold. This low RMSEA value reflects a close fit to the population structure, further supported by a *p*-value confirming the model’s adequacy at a statistically robust level. Kline (2016) also emphasizes the importance of indices like RMSEA for providing a holistic view of model fit, as they account for both sample size and model complexity, adding to the strength of our findings (MacCallum, Browne, & Sugawara, 1996).

Moreover, the IFI at 0.969 and the NFI at 0.942 exceeded 0.9, supporting the adequacy of the model. These indices indicate that our model offer substantially improves a model with no structured relationships, aligning well with SEM best practices.

In summary, the consistently strong results across these indices validated the hypothesized relationships between authentic leadership, knowledge-sharing, and employee turnover, even in the lack of *p*-value. This multi-index approach, advocated by SEM researchers, confirmed that the model is accurate and representative of the underlying data, providing a robust foundation for interpreting the findings and supporting the development of our hypotheses.

We tested the relationships between authentic leadership, knowledge-sharing, and turnover in the model (Figure 1). Authentic leadership had four dimensions with 16 items, i.e. self-awareness (AL_SA1 – AL_SA4), internalized moral perspective (AL_IP1-AL_IP4), relational transparency (AL_RT1-AL_RT5), and balanced processing (AL_BS1 – AL_BS3). Knowledge sharing had two dimensions with five items, i.e. implicit knowledge-sharing (KS_IP1 - KS_IP3) and explicit knowledge-sharing (KS_ES1 and KS_ES2). We evaluated the fit indices to determine the model’s adequacy. The *p*-value of the model was 0, which falls below the acceptable range of greater than 0.05, indicating that the model did not have a good fit in terms of statistical significance. However, the Chi-square (χ^2/df) value was 2.082, within the acceptable range of less than 3, suggesting a reasonable fit.

Further, the GFI measured at 0.933 and thus exceeded the acceptable threshold of greater than 0.9, indicating a good fit. Similarly, the CFI was 0.969, well above the acceptable threshold of greater than 0.9, indicating an excellent fit. The TLI also demonstrated a good fit with a value of 0.962, exceeding the acceptable threshold of greater than 0.9.

The RMSEA was 0.046, within the acceptable range of less than 0.05, further supporting the model’s good fit. The IFI measured at 0.969 and the NFI at 0.942, both above the acceptable threshold of greater than 0.9, reinforce the model’s good fit.

In summary, despite the *p*-value indicating a lack of statistical significance, the other fit indices suggested that the overall model fit well. The data strongly supports the hypothesized links between authentic leadership, knowledge-sharing, and employee turnover, confirming the proposed hypotheses.

In Table 5, authentic leadership has a significant positive effect on knowledge sharing, and a significant negative effect on turnover intention, while the influence of knowledge sharing on turnover intention was not statistically significant.

The structural model results offer significant insights into the relationships among authentic leadership, knowledge-sharing, and employee turnover. Authentic leadership had a positive and statistically significant impact on knowledge-sharing, with an estimate of 1.047, a

Table 5. Summary of SEM results

	Estimate	S.E.	C.R.	P
Knowledge_Sharing ← Authentic_Leadership	1.047	0.201	5.2	***
Turnover ← Authentic_Leadership	-1.629	0.353	-4.62	***
Turnover ← Knowledge_Sharing	0.273	0.169	1.615	0.106

Source(s): Authors’ own elaboration

standard error (S.E.) of 0.201, and a critical ratio (C.R.) of 5.2, with a p -value less than 0.001, indicating strong significance. This supports the hypothesis that authentic leadership enhances knowledge-sharing within organizations.

Furthermore, authentic leadership negatively impacts employee turnover, with an estimate of -1.629 , an S.E. of 0.353, and a C.R. of -4.62 , with a p -value less than 0.001. This statistically significant result supports the hypothesis that authentic leadership reduces employee turnover.

H1. Authentic leadership positively influences knowledge-sharing.

- (1) *Supported.* The SEM results showed a statistically significant positive impact of authentic leadership on knowledge-sharing, with an estimate of 1.047 and a p -value less than 0.001. This finding aligns with previous research, such as Hoch *et al.* (2018), which emphasized that authentic leaders create an open and supportive environment conducive to sharing knowledge. Authentic leaders foster trust and transparency, which are critical for encouraging employees to exchange ideas and knowledge within the organization (Avolio *et al.*, 2004; Rego, Sousa, Marques, & Cunha, 2013). Chang, Busser, and Liu (2020) demonstrated that authentic leadership enhances knowledge-sharing behaviors in technology firms, attributing the effect to the trust and communication openness fostered by authentic leaders. Wang, van Woerkom, Breevaart, Bakker, and Xu (2023) conducted a meta-analysis affirming the positive correlation between authentic leadership and knowledge-sharing across organizational contexts. Asghar *et al.* (2022) found that authentic leaders in educational institutions promote knowledge-sharing by fostering transparency and continuous learning.

H2. Authentic leadership negatively impacts employee turnover.

- (1) *Supported.* The results indicated a significant negative relationship between authentic leadership and turnover, with an estimate of -1.629 and a p -value less than 0.001. This outcome supports the hypothesis that authentic leadership reduces turnover by fostering a positive organizational culture that increases job satisfaction and commitment (Walumbwa *et al.*, 2008). Prior studies, including Leroy, Palanski, and Simons (2012), have shown that authentic leadership can reduce turnover by enhancing employees' sense of purpose and alignment with organizational values. Previous research by Guchait, Peyton, Madera, Gip, and Molina-Collado (2023) indicated that authentic leaders decrease turnover intentions by fostering a positive work environment and encouraging open communication. Additional research supports these findings. Laschinger *et al.* (2013) found that authentic leadership significantly decreases turnover intentions by enhancing job satisfaction and organizational commitment in healthcare environments, underscoring the broad applicability of authentic leadership across various industries. Similarly, Jensen and Luthans (2006) observed that authentic leadership directly influences employee engagement and well-being, which are critical factors in turnover reduction. Finally, Oh and Oh (2017) found authentic leadership to lower turnover intentions by fostering positive psychological capital among employees, suggesting that authentic leaders' positive self-concept and resilience also play a key role in retaining staff.

H3. Knowledge sharing negatively impacts employee turnover.

- (1) *Not supported.* The analysis revealed that knowledge-sharing did not have a statistically significant effect on employee turnover, as indicated by an estimate of 0.273 and a p -value of 0.106. This result suggests that while knowledge-sharing may enrich the organizational culture, it does not directly reduce turnover in this model.

This finding contrasts with previous studies, such as by [Connelly et al. \(2019\)](#), who posited that knowledge-sharing enhances job satisfaction and, therefore, could indirectly reduce turnover. However, this discrepancy could result from contextual differences or varying definitions of knowledge-sharing and turnover in prior research. For instance, [Swift, Callahan, Ivanovic, and Kominiak \(2010\)](#) found that knowledge-sharing reduced turnover intentions when the organization fostered a highly collaborative culture and offered incentives for knowledge exchange. Similarly, [Cabrera, Ferré, and Obiedkov \(2024\)](#) highlighted that the success of knowledge-sharing practices in retaining employees often depends on strong support systems, including managerial encouragement and reward structures. In settings where these supportive elements are lacking, knowledge-sharing may have less impact on reducing turnover intentions.

Moreover, the definitions and types of knowledge-sharing can affect outcomes. [Bock, Zmud, Kim, and Lee \(2005\)](#) found that while explicit knowledge-sharing (e.g. documented reports and manuals) has minimal impact on turnover, implicit knowledge-sharing (e.g. sharing personal experiences and insights) can foster stronger interpersonal bonds and increase organizational commitment, thereby reducing turnover. However, if implicit knowledge-sharing is limited or undervalued in the organizational setting, its potential impact on retention may diminish.

These findings highlight the complexity of knowledge-sharing's effects and suggest that its potential for reducing turnover may depend on specific organizational factors, such as cultural values, reward systems, and types of shared knowledge.

Moreover, [Mahmoud, Reisel, and Fuxman \(2021\)](#) highlight that the impact of knowledge-sharing on retention is context-dependent, often requiring strong organizational support and a collaborative climate to influence turnover meaningfully. Similarly, [Akhavan and Hosseini \(2015\)](#) argue that knowledge-sharing initiatives are most effective in reducing turnover when leaders actively support these practices, which helps employees feel valued and integrated into the organizational culture.

Another recent study by [Islam, Khan, Ahmed, Usman, and Ali \(2022\)](#) found that implicit knowledge-sharing (informal, experience-based insights) positively influences employee retention, building stronger social bonds and enhancing organizational commitment. However, suppose knowledge-sharing practices are primarily explicit (e.g. sharing formal documents and procedures). In that case, their impact on reducing turnover may be limited due to the lack of personal connection fostered through informal exchanges.

However, the relationship between knowledge-sharing and turnover was not statistically significant, with an estimate of 0.273, an S.E. of 0.169, a C.R. of 1.615, and a p -value of 0.106. This indicates that knowledge-sharing did not have a significant direct effect on employee turnover in this model.

In summary, these findings highlight that while authentic leadership positively influences knowledge-sharing and negatively impacts turnover, knowledge-sharing does not significantly mediate the relationship between authentic leadership and employee turnover.

Discussion and conclusion

We examined the relationships among authentic leadership, knowledge-sharing, and organizational employee turnover. We aimed to determine the impact of authentic leadership on knowledge-sharing and employee turnover and explore the mediating role of knowledge-sharing between authentic leadership and employee turnover. The empirical results provide important insights into these dynamics, building on existing literature on leadership and organizational behavior.

Theoretical implications

The findings from the CFA and structural model analysis offer several theoretical implications for the field of leadership and organizational studies. The CFA results indicated a good overall model fit, with most fit indices, such as Chi-square (χ^2/df), GFI, CFI, TLI, RMSEA, IFI, and NFI, falling within acceptable ranges. This supports the model's validity and the hypothesized relationships among authentic leadership, knowledge-sharing, and employee turnover.

We found authentic leadership to have a significant positive impact on knowledge-sharing. This aligns with previous research that highlights the role of authentic leadership in fostering an open and supportive environment conducive to knowledge-sharing. Moreover, authentic leadership demonstrated a significant negative impact on employee turnover, suggesting that authentic leaders can enhance employee retention by fostering trust and commitment among employees, consistent with the findings of [Avolio and Gardner \(2005\)](#).

- (1) *Promoting authentic leadership programs:* IT organizations should prioritize leadership development programs emphasizing authentic leadership qualities, such as self-awareness, relational transparency, and an internalized moral perspective. Given the high turnover rates in the IT sector, training leaders to be genuine, trustworthy, and supportive can foster an environment where employees feel valued and engaged. By building trust and open communication, organizations can create a workplace culture that encourages employees to remain committed to their teams ([Sri Ramalu & Janadari, 2022](#)).
- (2) *Encouraging knowledge-sharing practices:* Since knowledge-sharing has been identified as a key mediator in reducing turnover, IT organizations should implement systems and incentives that promote knowledge exchange. This could involve creating knowledge-sharing platforms, establishing mentorship programs, and rewarding employees who actively contribute to the organization's collective knowledge base. By embedding these practices into the organizational culture, IT companies can improve collaboration, reduce the loss of tacit knowledge, and retain expertise within the organization ([Alkan & Aydođdu, 2019](#)).
- (3) *Tailored retention strategies for knowledge workers:* Given the unique expectations of IT professionals, organizations should recognize that traditional retention strategies may not suffice. The study's findings suggest that authentic leadership, coupled with active knowledge-sharing practices, can significantly enhance retention. IT organizations should consider flexible work options, continuous learning opportunities, and career progression paths as part of their retention strategy, especially for highly skilled employees who may otherwise seek new opportunities elsewhere.
- (4) *Leveraging organizational size and resources:* Larger IT companies, which often have more resources, are better positioned to implement comprehensive, authentic leadership and knowledge-sharing initiatives. These organizations should capitalize on their size by providing leaders with the resources to foster authentic leadership behaviors, such as professional development tools, mentoring programs, and platforms that support open communication. Smaller IT firms, meanwhile, can focus on building close-knit, transparent relationships and creating a strong team culture where leaders can engage directly with employees.

However, we found no support for the hypothesized mediating role of knowledge-sharing between authentic leadership and employee turnover. The relationship between knowledge-sharing and turnover was not statistically significant, indicating that knowledge-sharing does not directly impact employee turnover in this context. This suggests that other factors, such as organizational culture or job satisfaction, might be more critical in mediating the effect of authentic leadership on turnover.

Managerial implications

From a managerial perspective, the findings of this study provide valuable insights for organizations aiming to improve leadership practices and reduce employee turnover. The significant positive impact of authentic leadership on knowledge-sharing underscores the importance of developing authentic leaders who can foster a supportive and open environment. Training programs focused on authentic leadership development can be beneficial in enhancing knowledge-sharing within organizations. Given the observed relationship between authentic leadership and employee turnover, businesses in the IT sector should consider how effective authentic leadership can be in reducing employees' intentions to leave. Selecting and training authentic leaders can logically enhance employee engagement and foster a culture of knowledge-sharing, which is essential in knowledge-driven industries like IT. To achieve this, organizations should implement comprehensive leadership development programs that encourage authentic leadership behaviors among managers. These programs can promote positive attitudes, which help retain valuable employees by fostering trust, transparency, and open communication.

Research results highlight the practical importance of authentic leadership in IT companies, especially regarding the challenges of reducing turnover and enhancing knowledge-sharing. This study confirmed that authentic leadership significantly positively impacts knowledge-sharing within the organization, as leaders who act openly and transparently foster trust and facilitate the exchange of ideas and information among employees. Furthermore, authentic leadership has a direct negative impact on employee turnover, creating a more stable organizational culture that enhances job satisfaction and team commitment. On the other hand, although knowledge-sharing did not directly impact reducing turnover, these results suggest that the effect may be indirect and depend on organizational factors, such as internal procedures and the specific characteristics of the sector in which the company operates. Such practical insights can serve IT companies as guidelines for improving their leadership approaches and knowledge-sharing practices.

- (1) Encourage transparent leadership practices to facilitate knowledge-sharing: IT companies should prioritize leadership practices emphasizing transparency and openness. Leaders who are authentic in their interactions create an environment of trust where employees feel more comfortable sharing knowledge. This approach can be reinforced through regular open forums, Q&A sessions with leadership, and transparent decision-making processes.
- (2) Develop team-based knowledge-sharing activities: Creating structured opportunities for team-based knowledge-sharing can enhance the collective knowledge within the organization. Examples include cross-departmental workshops, "lunch and learn" sessions, and collaborative projects. Such activities encourage knowledge transfer and foster teamwork, enabling employees to learn from each other's experiences and skills (Ullah & Kakakhel, 2021).
- (3) Implement authentic leadership training to reduce turnover: Authorities should incorporate training programs focused on authentic leadership into leadership development. These programs can equip managers with skills to lead with integrity, openness, and empathy, essential for creating a positive work culture. When leaders apply authentic leadership principles, it increases employee satisfaction and reduces turnover, as employees feel valued and aligned with the organization's mission.
- (4) Create a feedback-oriented culture to strengthen employee retention: Establishing a culture where feedback is actively encouraged and valued can increase employee retention rates. By integrating regular feedback mechanisms – such as online check-ins, employee surveys, and structured performance reviews – employees feel that the employee hears their voices and that they have a role in shaping the workplace. This fosters a sense of belonging and commitment, reducing the likelihood of turnover (Connelly *et al.*, 2019).

Moreover, the significant positive impact of authentic leadership on employee turnover highlights the need for organizations to promote authentic leadership styles to enhance employee retention. By fostering trust and commitment, authentic leaders can reduce turnover rates, which can lead to greater organizational stability and performance.

Given that knowledge-sharing does not mediate the relationship between authentic leadership and turnover, managers should consider other factors that might influence this relationship. Organizational culture, employee engagement, and job satisfaction are potential areas to explore for improving employee retention.

In conclusion, this study contributes to the growing body of literature on authentic leadership by demonstrating its positive impact on knowledge-sharing and its role in reducing employee turnover. However, knowledge-sharing does not mediate the relationship between authentic leadership and turnover, indicating the need for further research to explore additional mediators or moderators. Organizations should focus on developing authentic leaders and creating supportive environments to enhance knowledge-sharing and reduce employee turnover.

Limitations and future research

While this study provides valuable insights into the relationships among authentic leadership, knowledge-sharing, and employee turnover, it has limitations. First, the study's cross-sectional design limits the ability to draw causal inferences. Longitudinal studies would be necessary to establish causality and examine the long-term effects of authentic leadership on knowledge-sharing and employee turnover. Second, we conducted the study within a specific organizational context, which may limit the generalizability of the findings. Replicating the study in different industries and cultural settings would enhance the robustness and applicability of the results. Third, while the hypothesized model included knowledge-sharing as a mediator, the study did not find significant evidence for this mediating role. This suggests the need to further explore other potential mediators or moderators that might influence the relationship between authentic leadership and employee turnover, such as organizational culture, job satisfaction, or employee engagement. Future research could address these limitations by adopting a longitudinal design to examine the dynamic relationships among authentic leadership, knowledge-sharing, and employee turnover. This approach would provide a deeper understanding of how these variables interact over time and the long-term impact of authentic leadership.

Exploring additional mediators and moderators in the relationship between authentic leadership and employee turnover is another promising avenue for future research. Variables such as organizational culture, job satisfaction, employee engagement, and psychological safety could provide a more comprehensive understanding of how authentic leadership influences turnover.

Furthermore, expanding the research to different organizational contexts and cultural settings would enhance the generalizability of the findings. Comparative studies across various industries and countries could reveal contextual factors that affect the relationships among authentic leadership, knowledge-sharing, and employee turnover.

Finally, future studies could utilize mixed-methods approaches and combine quantitative and qualitative data to gain a richer and more nuanced understanding of the phenomena. Interviews and focus groups with employees and leaders could provide deeper insights into the processes and experiences underlying the quantitative findings.

In summary, while this study contributes to understanding authentic leadership's impact on knowledge-sharing and employee turnover, addressing its limitations and exploring new research avenues will further advance the field. Building on these findings, future research can provide more comprehensive insights and practical implications for enhancing leadership practices and organizational outcomes.

References

- Akhavan, P., & Hosseini, S. M. (2015). Social capital, knowledge sharing, and innovation capability: An empirical study of R&D teams in Iran. *Technology Analysis and Strategic Management*, 27(5), 532–553. doi:[10.1080/09537325.2015.1072622](https://doi.org/10.1080/09537325.2015.1072622).
- Alkan, D., & Aydoğdu, B. (2019). The effect of authentic leadership on intrinsic motivation of millennial engineers working in information technology (IT) sector. *Journal of Business Research – Turk*, 11(3), 1503–1517. doi: [10.20491/isarder.2019.686](https://doi.org/10.20491/isarder.2019.686).
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, 29(1), 99–118. doi: [10.1177/014920630302900107](https://doi.org/10.1177/014920630302900107).
- Amankwaa, A., & Anku-Tsedee, O. (2015). Linking transformational leadership to employee turnover: The moderating role of alternative job opportunity. *International Journal of Business Administration*, 6(4). doi: [10.5430/ijba.v6n4p19](https://doi.org/10.5430/ijba.v6n4p19).
- Amber, Q., Qazi, A. B., Javaid, N., Khan, I. A., & Ahmad, M. (2021). Knowledge sharing in public organizations in Pakistan: Leaders' ethical role and psychological capital of employees. *Information Discovery and Delivery*, 50(1), 99–114. doi: [10.1108/IDD-11-2020-0148](https://doi.org/10.1108/IDD-11-2020-0148).
- Asghar, M. Z., Barbera, E., Rasool, S. F., Seitamaa-Hakkarainen, P., & Mohelská, H. (2022). Adoption of social media-based knowledge-sharing behaviour and authentic leadership development: Evidence from the educational sector of Pakistan during COVID-19. *Journal of Knowledge Management*, 27(1), 59–83. doi: [10.1108/JKM-11-2021-0892](https://doi.org/10.1108/JKM-11-2021-0892).
- Ausar, K., Kang, H. J. A., & Kim, J. S. (2016). The effects of authentic leadership and organizational commitment on turnover intention. *The Leadership and Organization Development Journal*, 37(2), 181–199. doi: [10.1108/LODJ-05-2014-0090](https://doi.org/10.1108/LODJ-05-2014-0090).
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315–338. doi: [10.1016/j.leaqua.2005.03.001](https://doi.org/10.1016/j.leaqua.2005.03.001).
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15(6), 801–823. doi: [10.1016/j.leaqua.2004.09.003](https://doi.org/10.1016/j.leaqua.2004.09.003).
- Azanza, G., Moriano, J. A., Molero, F., & Lévy Mangin, J.-P. (2015). The effects of authentic leadership on turnover intention. *The Leadership and Organization Development Journal*, 36(8), 955–971. doi: [10.1108/LODJ-03-2014-0056](https://doi.org/10.1108/LODJ-03-2014-0056).
- Baquero, A. (2023). Authentic leadership, employee work engagement, trust in the leader, and workplace well-being: A moderated mediation model. *Psychology Research and Behavior Management*, 16, 1403–1424. doi: [10.2147/PRBM.S407672](https://doi.org/10.2147/PRBM.S407672).
- Barrett, P. (2007). Structural equation modelling: Adjudging model fit. *Personality and Individual Differences*, 42(5), 815–824. doi: [10.1016/j.paid.2006.09.018](https://doi.org/10.1016/j.paid.2006.09.018).
- Bass, B. M., & Bass Bernard, M. (1985). *Leadership and performance beyond expectations*. New York: The Free Press.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. New York: Psychology Press. doi: [10.4324/9781410617095](https://doi.org/10.4324/9781410617095).
- Bi, Y. (2016). A review of employees collective turnover research and prospects. In *2016 International Conference on Humanity, Education and Social Science* (pp. 292–295). doi: [10.2991/ichess-16.2016.64](https://doi.org/10.2991/ichess-16.2016.64).
- Bock, G.-W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29(1), 87–111. doi: [10.2307/25148669](https://doi.org/10.2307/25148669).
- Cabrera, I. P., Ferré, S., & Obiedkov, S. (2024). *Conceptual knowledge structures: First international joint conference on conceptual structures (ICCS) and concept lattices and their applications (CLA)*, Dresden, Germany, July 23–29, proceedings. Springer.

- Chang, W., Busser, J., & Liu, A. (2020). Authentic leadership and career satisfaction: The meditating role of thriving and conditional effect of psychological contract fulfillment. *International Journal of Contemporary Hospitality Management*, 32(6), 2117–2136. doi: [10.1108/IJCHM-06-2019-0551](https://doi.org/10.1108/IJCHM-06-2019-0551).
- Chi, N.-W., & Pan, S.-Y. (2012). A multilevel investigation of missing links between transformational leadership and task performance: The mediating roles of perceived person-job fit and person-organization fit. *Journal of Business and Psychology*, 27(1), 43–56. doi: [10.1007/s10869-011-9211-z](https://doi.org/10.1007/s10869-011-9211-z).
- Connelly, C. E., Černe, M., Dysvik, A., & Škerlavaj, M. (2019). Understanding knowledge hiding in organizations. *Journal of Organizational Behavior*, 40(7), 779–782. doi: [10.1002/job.2407](https://doi.org/10.1002/job.2407).
- Đekić, I., Duric, Z., & Simi, M. (2024). Digital transformation and economy of Serbia. In *Proceedings Book from Second International Scientific Conference “Challenges of Digitalization in the Business World”*, Belgrade.
- Dess, G. G., & Shaw, J. D. (2001). Voluntary turnover, social capital, and organizational performance. *Academy of Management Review*, 26(3), 446–456. doi: [10.5465/amr.2001.4845830](https://doi.org/10.5465/amr.2001.4845830).
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). Can you see the real me? A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16(3), 343–372. doi: [10.1016/j.leaqua.2005.03.003](https://doi.org/10.1016/j.leaqua.2005.03.003).
- Gardner, W. L., Cogliser, C. C., Davis, K. M., & Dickens, M. P. (2011). Authentic leadership: A review of the literature and research agenda. *The Leadership Quarterly*, 22(6), 1120–1145. doi: [10.1016/j.leaqua.2011.09.007](https://doi.org/10.1016/j.leaqua.2011.09.007).
- Gu, A., Nawaz, A., Abbas, S., & Lv, B. (2024). Enhancing organizational performance through knowledge-oriented leadership: The neglected role of employee creative work behavior and digital citizenship behavior in IT industry. *Kybernetes*, 119. doi: [10.1108/K-10-2023-2084](https://doi.org/10.1108/K-10-2023-2084).
- Guchait, P., Peyton, T., Madera, J. M., Gip, H., & Molina-Collado, A. (2023). 21st century leadership research in hospitality management: A state-of-the-art systematic literature review. *International Journal of Contemporary Hospitality Management*, 35(12), 4259–4296. doi: [10.1108/IJCHM-05-2022-0620](https://doi.org/10.1108/IJCHM-05-2022-0620).
- Haider, M., Rasli, A., Akhtar, C. S., Yusoff, R. B. M., Malik, O. M., Aamir, A., . . . Tariq, F. (2015). The impact of human resource practices on employee retention in the telecom sector. *International Journal of Economics and Financial Issues*, 5(1), 63–69.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hancock, J. I., Allen, D. G., Bosco, F. A., McDaniel, K. R., & Pierce, C. A. (2013). Meta-analytic review of employee turnover as a predictor of firm performance. *Journal of Management*, 39(3), 573–603. doi: [10.1177/0149206311424943](https://doi.org/10.1177/0149206311424943).
- Hislop, D. (2003). Linking human resource management and knowledge management via commitment: A review and research agenda. *Employee Relations*, 25(2), 182–202. doi: [10.1108/01425450310456479](https://doi.org/10.1108/01425450310456479).
- Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. *Journal of Management*, 44(2), 501–529. doi: [10.1177/0149206316665461](https://doi.org/10.1177/0149206316665461).
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. doi: [10.1080/10705519909540118](https://doi.org/10.1080/10705519909540118).
- Islam, T., Khan, M. M., Ahmed, I., Usman, M., & Ali, M. (2022). The impact of authentic leadership on innovative work behavior: The role of proactive personality and work engagement. *Frontiers in Psychology*, 13, 879176. doi: [10.3389/fpsyg.2022.879176](https://doi.org/10.3389/fpsyg.2022.879176).
- Jensen, S. M., & Luthans, F. (2006). Entrepreneurs as authentic leaders: Impact on employees' attitudes. *The Leadership and Organization Development Journal*, 27(8), 646–666. doi: [10.1108/01437730610709273](https://doi.org/10.1108/01437730610709273).

- Jun, K., Hu, Z., & Lee, J. (2024). Unlocking the relationship between authentic leadership and organizational citizenship behavior: The key roles of organizational support and identification. *Management Research Review*, 48(1), 57–77. doi: [10.1108/MRR-09-2023-0662](https://doi.org/10.1108/MRR-09-2023-0662).
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed., xvii, p. 534). New York: Guilford Press.
- Korn Ferry (2021). Future of work trends 2021: The new era of humanity. Available from: <https://www.kornferry.com/insights/this-week-in-leadership/future-of-work-trends-2021>
- Laschinger, H. K. S., Wong, C. A., & Grau, A. L. (2013). Authentic leadership, empowerment and burnout: A comparison in new graduates and experienced nurses: Authentic leadership and empowerment. *Journal of Nursing Management*, 21(3), 541–552. doi: [10.1111/j.1365-2834.2012.01375.x](https://doi.org/10.1111/j.1365-2834.2012.01375.x).
- Lee, T. W., Hom, P. W., Eberly, M. B., & Li, J. J. (2018). Managing employee retention and turnover with 21st century ideas. *Organizational Dynamics*, 47(2), 88–98. doi: [10.1016/j.orgdyn.2017.08.004](https://doi.org/10.1016/j.orgdyn.2017.08.004).
- Leroy, H., Palanski, M. E., & Simons, T. (2012). Authentic leadership and behavioral integrity as drivers of follower commitment and performance. *Journal of Business Ethics*, 107(3), 255–264. doi: [10.1007/s10551-011-1036-1](https://doi.org/10.1007/s10551-011-1036-1).
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121. doi: [10.1037/0021-9010.86.1.114](https://doi.org/10.1037/0021-9010.86.1.114).
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership: A positive developmental approach. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 241–261). Berrett-Koehler.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130–149. doi: [10.1037/1082-989X.1.2.130](https://doi.org/10.1037/1082-989X.1.2.130).
- Mahmoud, M. A., Reisel, W. D., & Fuxman, L. (2021). The role of ethical leadership, work values, and psychological contract fulfillment in the prediction of turnover intention. *Journal of Business Research*, 134, 641–653. doi: [10.1016/j.jbusres.2021.05.047](https://doi.org/10.1016/j.jbusres.2021.05.047).
- Masood, D. R. Z. (2024). Strategies for employee retention in high turnover sectors: An empirical investigation. *International Journal of Research in Human Resource Management*, 6(1), 33–41. doi: [10.33545/26633213.2024.v6.i1a.167](https://doi.org/10.33545/26633213.2024.v6.i1a.167).
- Meso, P., & Smith, R. (2000). A resource-based view of organizational knowledge management systems. *Journal of Knowledge Management*, 4(3), 224–234. doi: [10.1108/13673270010350020](https://doi.org/10.1108/13673270010350020).
- Neider, L. L., & Schriesheim, C. A. (2011). The authentic leadership inventory (ALI): Development and empirical tests. *The Leadership Quarterly*, 22(6), 1146–1164. doi: [10.1016/j.leafqua.2011.09.008](https://doi.org/10.1016/j.leafqua.2011.09.008).
- Nonaka, I., & Peltokorpi, V. (2006). Objectivity and subjectivity in knowledge management: A review of 20 top articles. *Knowledge and Process Management*, 13(2), 73–82. doi: [10.1002/kpm.251](https://doi.org/10.1002/kpm.251).
- Nonaka, I., Takeuchi, H., & Umemoto, K. (1996). A theory of organizational knowledge creation. *International Journal of Technology Management*, 11(7-8), 833–845. doi: [10.1504/IJTM.1996.025472](https://doi.org/10.1504/IJTM.1996.025472).
- Oh, J., & Oh, S. (2017). Authentic leadership and turnover intention: Does organizational size matter?. *The Leadership and Organization Development Journal*, 38(7), 912–926. doi: [10.1108/LODJ-08-2016-0209](https://doi.org/10.1108/LODJ-08-2016-0209).
- Pillay, P., Scheepers, C. B., & Diesel, R. (2024). Effect of authentic leadership on nurses' stress, burnout, presenteeism during COVID-19. *Leadership in Health Services*, 37(3), 423–441. doi: [10.1108/LHS-10-2023-0082](https://doi.org/10.1108/LHS-10-2023-0082).
- PN Analiza: Top 100 najvećih IT kompanija po prihodu u BiH – Poslovne novine (n.d.). Available from: <https://poslovnenovine.ba/2023/10/10/analiza-top-100-najvecih-it-kompanija-po-prihodu-u-bih/> [accessed 9 11 2024].

- Randhawa, G. (2007). Relationship between job satisfaction and turnover intentions: An empirical analysis. *Indian Management Studies Journal*, 11(2), 149–159.
- Rego, A., Sousa, F., Marques, C., & Cunha, M. P. (2013). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 66(5), 753–760. doi: [10.1016/j.jbusres.2011.09.002](https://doi.org/10.1016/j.jbusres.2011.09.002).
- Sharif, S., Albadry, O. M., Durrani, M. K., & Shahbaz, M. H. (2023). Leadership, tacit and explicit knowledge sharing in Saudi Arabian non-profit organizations: The mediating role of organizational commitment. *Global Knowledge, Memory and Communication*, 74(3/4), 656–677. doi: [10.1108/GKMC-02-2023-0050](https://doi.org/10.1108/GKMC-02-2023-0050).
- Shaw, J. D., Duffy, M. K., Johnson, J. L., & Lockhart, D. E. (2005). Turnover, social capital losses, and performance. *Academy of Management Journal*, 48(4), 594–606. doi: [10.5465/amj.2005.17843940](https://doi.org/10.5465/amj.2005.17843940).
- Sheshadri, T., Vallabhaneni, M., & Malhotra, N. (2024). Employee retention in the digital age: The role of work-life balance and job satisfaction with reference to IT sector. *Journal of Informatics Education and Research*, 4(3). Available from: <https://www.jier.org/index.php/journal/article/view/1457>
- Sri Ramalu, S., & Janadari, N. (2022). Authentic leadership and organizational citizenship behaviour: The role of psychological capital. *International Journal of Productivity and Performance Management*, 71(2), 365–385. doi: [10.1108/IJPPM-03-2020-0110](https://doi.org/10.1108/IJPPM-03-2020-0110).
- Swift, J. K., Callahan, J. L., Ivanovic, M., & Kominiak, N. (2010). Further examining the psychotherapy preference effect: A meta-regression analysis. *Psychotherapy Research*, 20(4), 396–407. doi: [10.1080/10503300903170795](https://doi.org/10.1080/10503300903170795).
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46(2), 259–293. doi: [10.1111/j.1744-6570.1993.tb00874.x](https://doi.org/10.1111/j.1744-6570.1993.tb00874.x).
- Tice, D. M., & Wallace, H. M. (2003). The reflected self: Creating yourself as (you think) others see you. In M. R. Leary, & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 91–105). Guilford Press.
- Tse, H. H. (2008). Transformational leadership and turnover: The roles of LMX and organizational commitment. In *Academy of Management Proceedings* (Vol. 2008, pp. 1–6). doi: [10.5465/ambpp.2008.33723870](https://doi.org/10.5465/ambpp.2008.33723870).
- Ullah, Y., Kakakhel, S., & Jan, S. (2021). The mediating role of employee creativity between knowledge sharing and innovative performance: Empirical evidence from manufacturing firms in emerging markets. *Management Research Review*, 45(1), 86–100. doi: [10.1108/MRR-03-2020-0164](https://doi.org/10.1108/MRR-03-2020-0164).
- Waldman, D. A., Carter, M. Z., & Hom, P. W. (2015). A multilevel investigation of leadership and turnover behavior. *Journal of Management*, 41(6), 1724–1744. doi: [10.1177/0149206312460679](https://doi.org/10.1177/0149206312460679).
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89–126. doi: [10.1177/0149206307308913](https://doi.org/10.1177/0149206307308913).
- Wang, J., van Woerkom, M., Breevaart, K., Bakker, A. B., & Xu, S. (2023). Strengths-based leadership and employee work engagement: A multi-source study. *Journal of Vocational Behavior*, 142, 103859. doi: [10.1016/j.jvb.2023.103859](https://doi.org/10.1016/j.jvb.2023.103859).
- Western Balkans Regular Economic Report (n.d.). World Bank. Available from: <https://www.worldbank.org/en/region/eca/publication/western-balkans-regular-economic-report> [accessed 9 10 2024].
- Winton, B. G., Whittington, J. L., & Meskelis, S. (2022). Authentic leadership: Making meaning and building engagement. *European Business Review*, 34(5), 689–705. doi: [10.1108/EBR-01-2022-0020](https://doi.org/10.1108/EBR-01-2022-0020).
- Wong, C. A., & Cummings, G. G. (2009). The influence of authentic leadership behaviors on trust and work outcomes of health care staff. *Journal of Leadership Studies*, 3(2), 6–23. doi: [10.1002/jls.20104](https://doi.org/10.1002/jls.20104).

Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of Management*, 15 (2), 251–289. doi: [10.1177/014920638901500207](https://doi.org/10.1177/014920638901500207).

Zeb, A., Abdullah, N. H., Hussain, A., & Safi, A. (2020). Authentic leadership, knowledge sharing, and employees' creativity. *Management Research Review*, 43(6), 669–690. doi: [10.1108/MRR-04-2019-0164](https://doi.org/10.1108/MRR-04-2019-0164).

Corresponding author

Amra Džambić can be contacted at: amradzambic997@gmail.com