

RESEARCH ARTICLE

WILEY

Understanding the drivers of organizational business performance from the human capital perspective

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Abstract

The purpose of this study is to understand the drivers of organizational business performance from the perspective of human capital. Data were collected from 691 employees working in 15 North American credit unions. The model was developed and tested by means of the Partial Least Squares Structural Equation Modeling technique. This study illuminates an underexplored mechanism driving the association between transformational leadership and business performance based on several theoretical frameworks such as leader–member exchange theory, the conservation of resources theory, the heuristic model of employee turnover, equity theory, and capital-based view. The findings indicate that transformational leaders provide their subordinates with constructive feedback and offer training and development (T&D) opportunities, which are the key factors driving employee job satisfaction. Employee job satisfaction curtails turnover intention, which, in turn, reduces human capital outflow and, consequently, increases business performance. Managers should always act as true transformational leaders and provide their subordinates with relevant performance feedback and ample T&D opportunities. Workers who undergo T&D at the expense of their organization become more loyal and are less likely to leave even though they become more marketable. Organizations are recommended to administer periodic employee satisfaction surveys and prevent the exodus of human capital, which may be difficult to replenish.

1 | INTRODUCTION

From the early phase of the industrial age, human capital had a limited role in the production process (Squicciarini & Voigtländer, 2015). Machinery was viewed as the central organizational resource, while employees were regarded as peripheral and expendable means that could be easily replenished. By the late 20th century, the situation had changed: the knowledge economy brought employees to the forefront because industry leaders began to recognize employees as organizational resources and assets that should be appreciated, cultivated, and properly managed (Donate & de Pablo, 2015; Issahaka & Lines, 2021). Presently, human capital is considered the basis for attaining

competitive advantage (Elayan et al., 2023). As a result, managers strive to retain competent employees with higher quantity and quality of knowledge, skills, and abilities (KSAs) to accumulate and retain human capital. Unlike formal elements of production that are likely to depreciate and become obsolete over time, human capital has an appreciative nature and is considered the kernel of sustainable competitive advantage and a valuable thermometer for business performance (Bendickson & Chandler, 2019; Campos et al., 2020; Reilly et al., 2014). Possessing ample human capital of superior quality enables organizations to exhibit greater levels of business performance (Aureli et al., 2019; Chatterjee et al., 2022), innovative development (Rehman et al., 2022), and competitive advantage (Rehman et al., 2022).

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On the one hand, previous studies have identified a number of human capital factors affecting business performance. Examples include HR practices (Barpanda & Bontis, 2021; Cillo et al., 2022), knowledge sharing (Allameh, 2018), personal knowledge networks (Ahmad, 2017), work design, supportive learning culture, teamwork, and motivation (Ali et al., 2022; Aureli et al., 2019; Bontis & Serenko, 2009a). On the other hand, these studies have mostly focused on a direct impact of one or several human capital-related factors on organizational performance. However, the relationship between the previously examined antecedents and business performance may not necessarily be direct and may be more complicated than previously thought. In particular, the impact of some human capital practices on business performance may be mediated through various factors that must be taken into consideration when developing human capital management policies and procedures. In other words, in addition to identifying the individual human capital management factors driving business performance, it is important to construct a nomological network explicating the path through which the impact occurs.

Among various factors affecting organizational performance, transformational leadership plays a critical role (Lee & Seol, 2021; Macauley, 2018; Xi et al., 2023; Yukl, 1989). Through idealized influence (charisma), inspirational motivation, intellectual stimulation, and individualized consideration, transformational leaders put their subordinates above their immediate self-interests (Lee et al., 2019; Ng, 2017; Park & Kim, 2021; Podsakoff et al., 1996). When necessary, transformational leaders accommodate and support internal and external change by realigning their organization's values and norms (Bass, 1999; Bontis & Serenko, 2009a; Ilies et al., 2006). What remains elusive in the literature is the subsequent chain of reactions and outcomes of transformational leadership, which unveils a scarcity of theoretical and managerial-oriented research explicating the underlying mechanisms by which transformational leadership influences business performance (Kucharska, 2021). This study proposes that these changes occur through the provision of performance feedback and training and development (T&D) opportunities. This investigation further hypothesizes and demonstrates that workers who receive valuable performance feedback and are presented with ample T&D opportunities become more satisfied with their jobs. Job satisfaction suppresses these employees' turnover intention which boosts organizational human capital and results in better business performance.

Therefore, the purpose of this study is to develop and empirically validate a timely conceptual model that goes beyond the previously documented relationships and explicates the underlying mechanisms and paths linking transformational leadership to human capital accumulation and business performance. To achieve this goal, this study integrates several rich and well-established theoretical frameworks—leader-member exchange (LMX), conservation of resources, and equity theories as well as the capital-based view (CBV) and the heuristic model of employee turnover—to examine the nexus among the constructs of interest. The model was tested by relying on the data provided by 691 employees from 15 North American credit unions, which are considered knowledge-based organizations (Serenko et al., 2016).

The remainder of this article is organized as follows. Section 2 presents the theoretical underpinnings and hypotheses, and Section 3 outlines the research methods. Sections 4 and 5 offer and discuss the findings, respectively, and Section 6 concludes the study.

2 | THEORETICAL BACKGROUND

2.1 | Transformational leadership, performance feedback, and training and development

This study posits that organizations in which managers exhibit strong transformational leadership are likely to provide relevant, useful, and frequent performance feedback to their employees as well as contribute to their T&D. Performance feedback and T&D are important work practices designed to act as change and performance mechanisms in contemporary organizations (Guo & Chen, 2022; Sommer & Kulkarni, 2012; Tannenbaum & Yukl, 1992). In the context of this study, performance feedback is defined as the degree to which managers offer useful, frequent and relevant advice, discuss expected outcomes, identify career goals, and clearly communicate other job-related matters to their subordinates (Bontis & Serenko, 2009a, 2009b). T&D reflects the degree to which an organization offers training, development, and education for its workers to ensure that their knowledge and skills are up-to-date with the requirements for their positions (Bontis & Serenko, 2009a; Sitzmann & Weinhardt, 2019). T&D may be considered a form of tangible rewards, benefits, and extrinsic motivation channeled from good managers to their subordinates.

Transformational leadership is the degree to which managers develop, empower, inform, inspire, and lead their subordinates by example as well as act as role models and delegate power (Bass, 1999; Bontis & Serenko, 2009a; Ilies et al., 2006; Park & Kim, 2018; Xiao et al., 2017). Therefore, organizations that practice transformational leadership regularly offer their employees helpful and practical performance feedback and invest in their educational and training activities. Transformational leadership is the process by which leaders use their own behavior to influence the actions of a group to achieve a common goal (Northouse, 2021; Yin et al., 2020). As a result, organizations exhibiting strong transformational leadership enjoy high employee performance and productivity (Galeazzo & Furlan, 2019; Macauley, 2018; Yukl, 1989; Zhao et al., 2023). Recently, the management literature has moved beyond the great man or leader theory in pursuit of the behavioral leadership paradigm (Stogdill, 1974), which focuses on describing how leaders' behavior influences their followers (Northouse, 2021).

The relationship between transformational leadership and performance feedback and between transformational leadership and T&D can be explained by applying the LMX theory as a lens of analysis. LMX describes a dyadic work relationship between leaders (managers) and their followers (employees) and argues that a high-quality relationship between leaders and followers reflects high LMX and vice versa (Bauer & Erdogan, 2015). When LMX is high, employees can obtain privileges and resources (e.g., empowerment, mutual trust, supervisory communication, social support). A good transformational

leader creates conditions that support employees' experience of autonomy and competence (Martin et al., 2016), which generates a feeling of shared identity, closeness, and sameness with the leader (Macauley, 2018) and fosters a positive perception of the leader's concern for her subordinates' development (Hamlin, 2004). This study theorizes that good transformational leadership exhibits behaviors that attend to employees' needs for performance feedback and personal development in the form of T&D. Employees, in turn, exhibit desired work attitudes and behaviors when LMX is high (Yammarino et al., 2005).

In the context of this study, high LMX occurs when employees perceive transformational leadership as supportive, empowering, and helpful, which triggers positive emotional reactions (Ng, 2017). For instance, by using performance feedback, managers communicate, inform, inspire, and motivate, and, at the same time, reduce job ambiguity of their subordinates (Lee et al., 2019). Transformational leadership supports the development and dissemination of information among peers and ensures that subordinates acquire updated skills by participating in seminars and specialized training. Transformational leaderships' provision of performance feedback and T&D enables employees to progress, excel, and resolve work challenges. Thus, employees are more likely to respond to transformational leadership by showing an increased acceptance of performance feedback and appreciation for the T&D opportunities. Based on the presented theoretical foundations, the following hypotheses are proposed:

H1. Transformational leadership has a positive direct effect on performance feedback.

H2. Transformational leadership has a positive direct effect on training and development.

2.2 | Performance feedback, training and development, and job satisfaction

Performance feedback is a process by which transformational leaders provide information to organizational members about their work performance and/or expected outcomes (Lee et al., 2019). Leaders' feedback can boost their subordinates' self-efficacy and intrinsic and extrinsic motivation (Fenwick et al., 2019; Liu & Gumah, 2020). A recent study by Lee et al. (2019) states that when leaders offer performance feedback, employees respond by adjusting their performance to meet the expected goals. Relevant feedback also allows employees to assess their own performance and gain a better understanding of the targets. Performance feedback with transparent and adequate explanations improves perceived fairness and opportunities for advancement (Sommer & Kulkarni, 2012). Employees perceive constructive performance feedback as a form of recognition and respect, which results in positive affect (Sommer & Kulkarni, 2012) and a higher level of job satisfaction (Kampkotter, 2017). Job satisfaction, defined as employees' overall assessment of all aspects of their current job (Spector, 1997), has become a crucial element in attracting

and retaining a skilled labor force (Stamolampros et al., 2019). When workers are satisfied with their job, they exhibit strong organizational commitment and a desire to stay with their present organization (Mobley, 1977; Mobley et al., 1978). It is for this reason, job satisfaction has been traditionally considered a very important construct in management research (e.g., see Kavalić et al., 2023; Ozpamuk et al., 2023).

Over time, employees' KSAs are likely to fade away or become obsolete. T&D represents the process by which workers update their knowledge, gain new expertise, and reskill (Kianto et al., 2017). When organizations offer T&D programs, employees' KSAs are nourished both horizontally and vertically. For instance, tailor-made training modules facilitate knowledge acquisition, creation, and sharing within an organization, which, in turn, enhances productivity and innovation (Singh et al., 2021). Employees who undergo T&D experience a sense of job satisfaction because they believe that their organization has invested in their career and personal development (Jung & Takeuchi, 2019; Sitzmann & Weinhardt, 2019). Furthermore, employees can use the newly acquired skills and knowledge to solve work problems and generate new ideas, which contributes to their overall self-efficacy and boosts their job satisfaction (Li et al., 2017). From the conservation of resources perspective, leaders are an important component within their employees' social and work environments (Hobfoll et al., 2018). Leaders ensure that employees have sufficient resources (e.g., communication, motivation, autonomy, access to knowledge, etc.) to accomplish their work. Hence, employees see performance feedback and T&D as instrumental to influencing positive work outcomes. Together, performance feedback and T&D give employees an interesting and rewarding job experience, which translates into high job satisfaction. Based on the reasoning above, the following hypotheses are proposed:

H3. Performance feedback has a positive direct effect on job satisfaction.

H4. Training and development has a positive direct effect on job satisfaction.

2.3 | Job satisfaction and turnover intention

Turnover intention, defined as workers' likelihood of willingly leaving their employers, is a major issue that requires attention of both academics and practitioners (Al Ahmad et al., 2017; Massingham & Tam, 2015; Nyberg & Ployhart, 2013; Ogbeibu et al., 2022; Yasin, 2021) due to its direct (i.e., financial) and indirect (i.e., production, morale, performance, etc.) costs (Hom & Griffeth, 1991; Jang & George, 2012; Ng, 2017; Syed et al., 2021; Wagner, 1994). According to the heuristic model of employee turnover (Mobley, 1977; Mobley et al., 1978), workers who are satisfied with all aspects of their job—including the work itself, pay, promotion, the quality of relationships with co-workers, the degree of belongingness to the organization, and self-value alignments—are more likely to stay with their current organization. Conversely, individuals who are dissatisfied with their job may initiate a withdrawal

process and, as a result, exhibit a strong intention for voluntary turnover (Jang & George, 2012; Judge et al., 1994). Specifically, dissatisfied employees start comparing and evaluating the ratio of their job effort and outcome with the perceived job effort and outcome of their co-workers. Accordingly, equity theory (Adams, 1963) argues that dissatisfied employees who perceive themselves as either under-rewarded or in an inequitable situation try to restore equity either by lowering job performance or leaving their organization (i.e., through turnover intention). In most situations, they start searching for alternative job opportunities elsewhere. In the literature, job satisfaction has been identified as a well-established predictor of turnover intention (Judge et al., 1994; Serenko & Abubakar, 2023; Serenko et al., 2022). Based on the arguments above, the following hypothesis is proposed:

H5. Job satisfaction has a negative direct effect on turnover intention.

2.4 | Turnover intention and human capital

When employees engage in voluntary turnover, they remove their KSAs from the organization's or unit's total human capital resources (Nyberg & Ployhart, 2013; Serenko, 2023a). Employee departure affects overall work dynamics in many ways: it creates a change in work roles, functionality, communication, knowledge sharing, and firm operations (De Winne et al., 2019; Hausknecht & Trevor, 2011). Most importantly, voluntary turnover dramatically reduces organizational human capital, defined as the aggregate knowledge, skills, competence, and tacit knowledge held by all employees (Edvinsson & Malone, 1997), which drives the production of innovative goods and services. Accordingly, Davenport and Prusak (1998) add that "human capital includes the intangible resources of abilities, effort, and time that workers bring to invest in their work" (p. 49).

The knowledge management literature emphasizes that creating, increasing, managing, and retaining high-quality human capital is vital for the very survival of contemporary organizations (Serenko et al., 2016; Sharabati et al., 2010). However, voluntary turnover, which represents the departure of employees from an organization on their own accord, results in a dramatic loss of human capital. This has an impact on various business domains, such as productivity, revenue, and profit (Stovel & Bontis, 2002). For instance, the exodus of a large number of workers with high KSAs may jeopardize the organizational workforce because those left behind are a less confident group of workers with fewer talents, skills, and alternative job options. Moreover, as soon as workers develop turnover intention, they disengage from knowledge sharing even before leaving their employer (Jacobs & Roodt, 2007). As a result, voluntary turnover directly depletes the quantity and quality of organizational human capital. In a similar vein, this study theorizes that as turnover intention increases, the quality and quantity of human capital also declines. It is hypothesized that:

H6. Turnover intention has a negative direct effect on human capital.

2.5 | Human capital and business performance

In today's highly volatile, uncertain, complex, and ambiguous business environment, knowledge has become a key component for gaining and retaining a competitive advantage, primarily due to its rarity, value, non-substitutability, and inimitability (Grant, 1996). It is important to recall that organizational knowledge resides within its workforce. An organization's human capital symbolizes individual employees' wealth of ideas, skills, competence, and intellectual capacity (Bontis, 2001). The resource-based view (RBV) of the firm considers all forms of a firm's resources, while the knowledge-based view (KBV) of the firm focuses on an organization's knowledge-management capabilities (Grant, 1996) for achieving a competitive advantage. CBV focuses on the knowledge assets and flows that are embedded within organizational entities (Edvinsson & Malone, 1997). In this sense, CBV can be considered as complementary to RBV and KBV, as the framework explains that knowledge assets nourish a firm's performance (Martin-de-Castro et al., 2011). In line with CBV, organizations that possess and operate the workforce with rare, valuable, non-substitutable, and inimitable knowledge and skillsets may attain a competitive advantage (Reed et al., 2006). If such knowledge cannot be easily imitated by competitors, it can be used to solve firm-specific problems, generate new ideas, and innovate products and services (Curado & Bontis, 2006). In fact, previous research has established that the quality and quantity of human capital in an organization can influence productivity, revenue, profit (Stovel & Bontis, 2002), and innovation processes (Buenechea-Elberdin et al., 2017).

As workers stay with their employers in the long-term, their organizations accumulate human capital, which, in turn, influences business outcomes (Reilly et al., 2014). Previous studies have already linked the inflow of human capital to increased business performance (Bendickson & Chandler, 2019; Campos et al., 2020; Kianto et al., 2017; Sharabati et al., 2010). By contrast, the outflow of human capital creates staffing challenges and disrupts business work activities (Call et al., 2015). While having a small rate of turnover is generally expected because this weeds out underperformers and promotes competitiveness (Hollenbeck & Williams, 1986), high voluntary turnover may disrupt various organizational procedures, such as work roles, relationships, and culture and, as a result, reduce business performance. To further validate the arguments above, the present study theorizes that the accumulation of human capital fosters business performance. It is posited that:

H7. Human capital has a positive direct effect on business performance.

Figure 1 visualizes the proposed research model and hypotheses.

3 | METHODS

Data for this study were collected as part of a larger project (Serenko & Bontis, 2016a, 2016b; Serenko, Bontis, & Hull, 2016). All items were adapted from the previous instruments employed by Bontis and Serenko (2009a, 2009b), Bontis, Richards, and Serenko (2011), and Bontis,

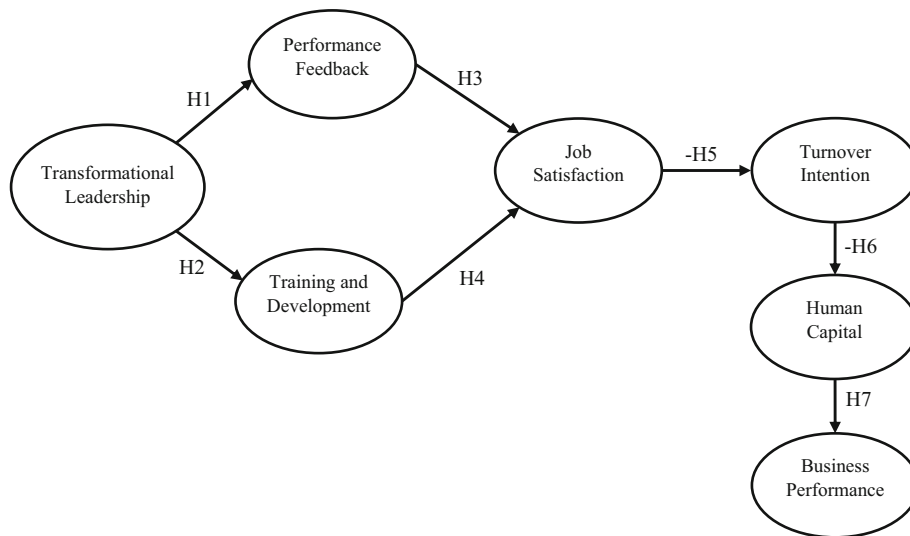


FIGURE 1 The research model.

Crossan, and Hulland (2002). Three rounds of extensive face validity assessment of the draft instrument were done by soliciting input from a group comprising scholars, practitioners, and potential respondents. Based on their feedback in each round, the instrument was adjusted until agreement on all items was reached. Next, the instrument was pilot tested by administering it to 105 knowledge workers, and no issues were found. The final version of the questionnaire was posted online and delivered to 2658 employees of 15 credit unions in North America: eight of them were in Canada and seven were in the United States. Credit unions represent knowledge-intensive organizations that fit well the context of this study. In addition, senior executives of these institutions confirmed the importance of internal knowledge-based practices. To recruit the participating institutions, the authors received support from two professional bodies that provide credit union services in Canada: Filene Research Institute and Credit Union Central of Canada. All items were measured on a seven-point Likert-type scale. The instrument also included basic demographic questions.

A high-level executive at each participating credit union sent a survey link to a group of randomly selected employees from various organizational levels. Prospective respondents were informed that participation in this study was voluntary. To encourage participation, managers highlighted the value of this study and the fact that the findings will be shared with their organization. Overall, 26% of all invitees fully completed the survey yielding a sample of 691 usable responses; 74% of the participants were female. On average, participants were 42 years old (from 19 to 77 years old). They had worked at their current credit union for 10 years and for 5 years in their present position, on average. More than 70% had received a post-secondary diploma or a degree.

4 | DATA ANALYSIS AND RESULTS

4.1 | The measurement model

The Partial Least Squares Structural Equation Modelling (PLS-SEM) algorithm was used to test the proposed model. PLS-SEM is devised to

explore complex associations with relatively weak theoretical foundations (Hair et al., 2020), and it fits well the knowledge management domain (Cepeda-Carrion et al., 2019). Its primary objective is causal-prediction, especially when normality assumptions are questioned and emphases is placed on explaining variance in the outcome variable (Hair et al., 2020). This study operationalized the PLS-SEM algorithm by using SmartPLS v.3 software to examine the nexus among the constructs of interest. During the assessment of the measurement model, two business performance items were discarded due to poor reliability, and the model was re-estimated. For the new measurement model, the Cronbach's alpha (α) and composite reliability (CR) values were above the threshold of 0.70, demonstrating reliability (Taber, 2018) and internal consistency (Hair et al., 2020). The average variance extracted (AVE) values of all constructs exceeded 0.50, reflecting the measurement model's convergent validity (Table 1). All item loadings were above the cut-off point of 0.7 for excellent items, and the matrix of items cross-loadings (available from the corresponding author) revealed no cross-loading issues. All loadings were significant at $p < .001$.

Construct discriminant validity was assessed using the traditional Fornell–Larcker and the HTMT ratio of correlations. The squared root of AVE of each construct was greater than all inter-construct correlations (Fornell & Larcker, 1981) (Table 1), and the HTMT ratios of correlations were below the more conservative cut-off value of 0.90 (Hair Jr et al., 2021; Henseler et al., 2015) (Table 2). Hence, the model's discriminant validity has been established.

Since the use of Harman's single factor test to estimate common method variance (CMV) has been widely criticized (Fuller et al., 2016), the present study operationalized the unmeasured marker variable (MV) to test for the potential threats of CMV (Podsakoff et al., 2012). The first unrotated general factor scores were extracted using principal axis factoring technique and used as MV. The R-squared coefficient of the endogenous variable (business performance) equaled 0.382 and 0.393 before and after the inclusion of the MV into the model, respectively. The MV accounts for only 1.1%, which is much lower than the 10% threshold. Hence, CMV was not a major concern in this study.

TABLE 1 Reliability and convergent and discriminant validity assessment.

#	Construct	C α	CR	AVE	1	2	3	4	5	6	7
1	Transformational leadership	0.972	0.975	0.797	0.893						
2	Training and development	0.927	0.943	0.734	0.313	0.857					
3	Performance feedback	0.943	0.957	0.817	0.701	0.548	0.904				
4	Job satisfaction	0.924	0.943	0.768	0.544	0.699	0.580	0.876			
5	Voluntary intention	0.863	0.901	0.647	0.341	-0.455	-0.449	-0.584	0.804		
6	Human capital	0.920	0.938	0.715	0.181	0.788	0.575	0.700	-0.425	0.846	
7	Business performance	0.790	0.877	0.703	0.382	0.561	0.557	0.582	-0.381	0.618	0.838

Note: Values along the diagonal (in bold) are the square root of AVE; values below the diagonal are inter-construct correlations. Abbreviations: AVE, average variance extracted; C α , Cronbach's alpha; CR, composite reliability.

TABLE 2 HTMT discriminant validity assessment.

#	Construct	1	2	3	4	5	6
1	Transformational leadership	-					
2	Training and development	0.588	-				
3	Performance feedback	0.872	0.586	-			
4	Job satisfaction	0.657	0.754	0.619	-		
5	Turnover intention	0.534	0.506	0.497	0.647	-	
6	Human capital	0.615	0.854	0.616	0.756	0.472	-
7	Business performance	0.585	0.654	0.642	0.675	0.455	0.721

TABLE 3 The structural model assessment.

Hypotheses	β	t	95% BCa CI
H1: Transformational leadership \rightarrow performance feedback	.84	54.647	0.806, 0.866
H2: Transformational leadership \rightarrow training and development	.56	16.069	0.488, 0.624
H3: Performance feedback \rightarrow job satisfaction	.28	8.179	0.212, 0.347
H4: Training and development \rightarrow job satisfaction	.55	16.703	0.479, 0.605
H5: Job satisfaction \rightarrow turnover intention	-.58	19.261	-0.639, -0.519
H6: Turnover intention \rightarrow human capital	-.43	11.711	-0.491, -0.349
H7: Human capital \rightarrow business performance	.62	17.736	0.539, 0.677

Note: β , beta values; BCa CI, bias-corrected confidence interval; t, t-values.

4.2 | The structural model

To assess the structural model, the guidelines by Hair Jr et al. (2021) were followed. Specifically, the size and significance of the path coefficients were examined based on a bias-corrected and accelerated (BCa) bootstrap with the 95% confidence interval ($n = 5000$). All path coefficients in the structural model are statistically significant at $p < .005$ (Table 3). As illustrated in Figure 2, a higher level of transformational leadership leads to a higher degree of performance feedback ($\beta = .84$) and T&D ($\beta = .56$). Consequently, performance feedback ($\beta = .28$) and T&D ($\beta = .55$) result in a higher level of job satisfaction. Furthermore, satisfied employees are less likely to voluntary leave ($\beta = -.58$), which suppresses human capital outflow ($\beta = -.43$). Consequently, human capital leads to a higher level of business performance ($\beta = .62$).

The strength of the impact of predictors was further assessed by calculating their effect size, also known as f -squared (Table 4). According to Cohen (2013), the effect size is a measure that shows the magnitude of effects caused by an exogenous variable on the endogenous variable, where 0.02 reflects small; 0.15, moderate; and 0.35 and above, large effect size. The model demonstrates moderate to large effect sizes. Thus, all hypotheses received further empirical support.

Overall, the analysis reveals the presence of serial mediation based on the 95% confidence interval. In that, the association between transformational leadership and business performance is serially mediated by performance feedback, employee job satisfaction, turnover intention, and human capital ($\beta = .036$, $p < .05$, CI [0.023, 0.052]). Subsequently, the association between transformational leadership and business performance is serially mediated by T&D,

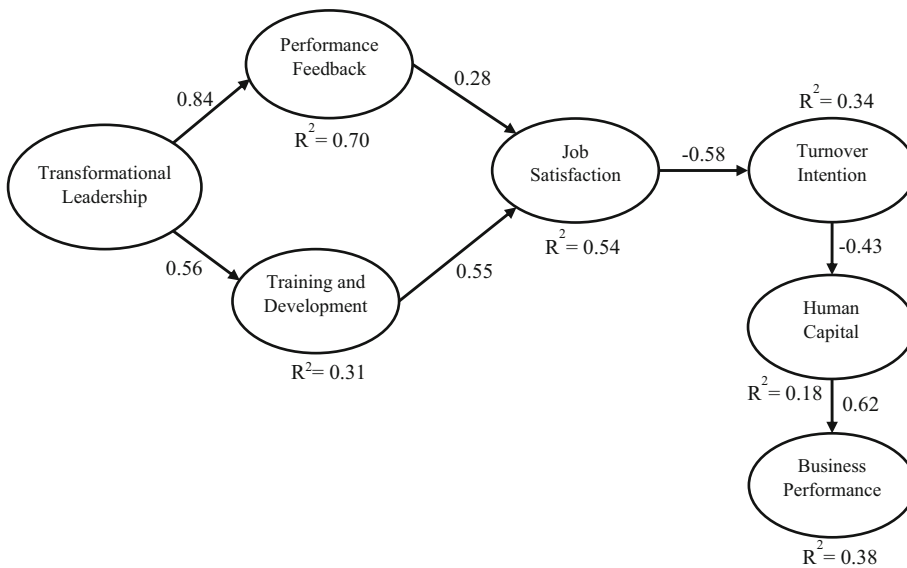


FIGURE 2 The structural model (all values are significant at $p < .005$).

Hypotheses	f^2	Effect size	Remarks
H1: Transformational leadership → performance feedback	2.347	High	Supported
H2: Transformational leadership → training and development	0.455	High	Supported
H3: Performance feedback → job satisfaction	0.121	Moderate	Supported
H4: Training and development → job satisfaction	0.456	High	Supported
H5: Job satisfaction → turnover intention	0.517	High	Supported
H6: Turnover intention → human capital	0.220	Moderate	Supported
H7: Human capital → business performance	0.618	High	Supported

TABLE 4 Effect size evaluation and hypotheses decision.

employee job satisfaction, turnover intention, and human capital ($\beta = .047, p < .05, CI [0.031, 0.065]$).

5 | DISCUSSION

The purpose of this study was to examine the underlying systematic antecedents of organizational business performance from the human capital perspective. By drawing on several integrated theoretical perspectives, this study proposed a nomological network and subjected it to rigorous empirical testing by using data provided by 691 employees from 15 North American credit unions. The hypotheses and the findings offer valuable theoretical and practical implications as discussed below.

5.1 | Theoretical implications

This study makes several contributions to the literature. First, it confirms the efficacy of the LMX theory in the context of human capital and shows that high-quality transformational leadership has a positive effect on performance feedback and T&D. Prior research has established the

predictive power of LMX in the context of workplace activities and outcomes (Bauer & Erdogan, 2015; Ng, 2017) and argues that managers act as organizational agents, and subordinates often generalize their managers' treatment as organizational treatment (Chen & Zhang, 2021). The present investigation strongly supports this notion in the context of human capital: strong transformational leaders communicate goals and vision, support employees to acquire new skills, encourage participation in decision-making, and eliminate ambiguities and barriers to help employees develop a “can do” attitude (Ilies et al., 2006; Macauley, 2018; Martin et al., 2016; Yammarino et al., 2005).

Second, consistent with prior research (Jung & Takeuchi, 2019; Lee et al., 2019; Li et al., 2017; Sitzmann & Weinhardt, 2019), the findings show that subordinates reciprocate to transformative leaders by exhibiting prosocial work behaviors such as valuing performance feedback and appreciating T&D opportunities and, as a result, increase their job satisfaction. This study confirms that, from the perspective of the conservation of resources theory, employees consider performance feedback and T&D as job resources (i.e., support from a good manager and investment by the hiring organization, respectively; Cropanzano et al., 2017; Hobfoll et al., 2018).

Third, previous research argues that the impact of performance feedback (Lee et al., 2019) and T&D (Sitzmann & Weinhardt, 2019) on

work outcomes is easier to identify by including intermediate processes. In an attempt to explicate such processes, the present study further contributes to the literature by linking performance feedback and T&D to intermediate processes—namely to employee job satisfaction, voluntary turnover, and human capital—prior to business performance. Recall that transformational leaders are employee-oriented: they care about their workers' personal development and career. Thus, such leaders provide employees with constructive performance feedback (i.e., high quality of communication, motivation, ambiguity reduction) and T&D opportunities to improve their KSAs, and employees who receive such benefits may reciprocate with higher job satisfaction, which is translated into lower turnover intention and increased effort to improve their organization's business performance. Sometimes, industry leaders and experts hesitate to engage their employees in regular T&D practices, primarily due to cost and the belief that employees who undergo relevant T&D programs may develop higher mobility, bargaining power, and turnover intention (Sung & Choi, 2018). However, this is not true, because, as this study shows, such programs also have positive organizational outcomes including lower turnover intention.

Fourth, this study's findings support the tenets of equity theory (Adams, 1963) and the heuristic model of employee turnover (Mobley, 1977; Mobley et al., 1978) by demonstrating that job satisfaction suppresses turnover intention. This further confirms that employees are active entities who make constant assessments of their job inputs (e.g., effort, time) and related outcomes (e.g., pay, promotion, quality of relationships), and any form of misalignment results in an unfavorable experience and dissatisfaction, which triggers withdrawal processes (i.e., turnover intention). Voluntary turnover is dangerous because it reduces organizational human capital. This conclusion aligns with past assertions, which state that when employees leave, their KSAs vanish from the organizational intellectual capital repository. Moreover, in many cases, KSAs of departing workers are transferred to other organizations that often compete with their previous employer (Nyberg & Ployhart, 2013). This results in severe consequences for the losing organization in terms of profit, image, and productivity (Stovel & Bontis, 2002). Logically, the departure of a large number of employees from a given organization appears to deplete human capital both in quantity and quality.

Fifth, the findings support the tenets of CBV and show that human capital inflow can boost organizational competitiveness and performance (Martin-de-Castro et al., 2011). This conclusion is in line with the past findings that have also linked the quality and quantity of human capital in an organization to increased productivity, revenue, profit, and innovation (Buenechea-Elberdin et al., 2017; Stovel & Bontis, 2002). This investigation argues that human capital inflow boosts business performance directly by elevating the level of skilled labor (qualitatively and quantitatively) and indirectly through knowledge spillover effects (i.e., where imported KSAs are absorbed and utilized by native employees).

Overall, this study contributes new insights to the literature and supports the generalizability of several existing theories. Employees see managers as suppliers of job resources (Lee et al., 2019), and consequently, they perceive performance feedback and T&D opportunities as

job resources. The findings reveal that transformational leaders support, encourage, and “grow” their subordinates through performance feedback and T&D, and that these resources, in turn, foster greater job satisfaction and reduce turnover intention. Furthermore, a decline in voluntary turnover accumulates human capital in an organization, and these KSA resources, in turn, foster greater business performance.

5.2 | Practical implications

This study offers several salient implications in terms of organizational human resources practices, their connection with voluntary turnover prevention, and the enhancement of human capital and business performance. First and foremost, managers should always act as true transformational leaders and provide their subordinates with relevant performance feedback and ample T&D opportunities. Good managers should also provide resources that shape the work atmosphere by inspiring, motivating, and developing employees to fully utilize their professional potential, which, in turn, increases these workers' job satisfaction. Presently, many T&D initiatives may be done in an online environment and cost less than in-person training. For instance, workers may be encouraged and rewarded for completing Massive Open Online Courses (MOOCs) and online certifications.

Second, there is a misconception that if workers undergo T&D at the expense of their organization, they become more marketable and, as a result, are more likely to leave. Managers should realize that this is merely a fallacy because an employer-centered investment in T&D allows firms to gain the loyalty and appreciation of their employees, which, in turn, fosters a sense of obligation to repay the employer by staying with the organization in the future. Third, managers should periodically measure the level of satisfaction of their employees because job dissatisfaction may drive workers away from their organization. For instance, this can be done as a part of routinely administered employee surveys. If managers notice a decline in the level of employee job satisfaction, they should investigate its underlying causes and proactively address the problem before it causes a wave of turnover. Fourth, managers should be aware of the recent Great Resignation trend when, since March 2021, workers have started quitting their jobs in massive numbers (Serenko, 2023). An unexpected exodus of workers depletes human capital and, as this study shows, reduces organizational business performance. A common response is to replenish human capital through hiring. This, however, may be very expensive or even impossible because the entire industry competes for a limited pool of available job applicants. Instead, managers should explore various options to retain their existing personnel. In addition to providing performance feedback and investing in T&D, they are recommended to look into other factors that may boost their employees' job satisfaction.

5.3 | Limitations and future research directions

Similar to most empirical studies, this research has several limitations. *First*, the cross-sectional design impedes our ability to draw

conclusions in terms of causal interference. Future work can utilize alternative designs such as longitudinal or experimental studies (Podsakoff et al., 2012), artificial intelligence techniques (Abubakar et al., 2019), decision trees (Yeo et al., 2021), and multi-sourced data. *Second*, even though stringent measures were taken to tackle CMV, the findings should be interpreted with caution given the self-reported and contextual nature of the data. Future work that utilizes secondary and multiple data sources or tests similar models in other industries and nations can support the generalizability of the findings. *Third*, this study did not take into consideration the quality of human capital losses, as the focus was on turnover intention rather than actual turnover. A fruitful research avenue should account for actual turnover and the quality of human capital lost. Furthermore, group dynamics such as in-group membership perceptions may potentially generate additional insights.

6 | CONCLUSION

Recent years have witnessed a dramatic change in the very fabric of the contemporary workforce. Due to the Great Resignation trend (Serenko, 2023), in most industries, it has become more difficult to attract and retain high-quality human capital. An emerging quiet quitting movement shows that many workers are now more demanding, more mobile, and less productive (Serenko, 2023b). As a result, human capital managers should seek innovative evidence-based approaches to manage, cultivate, and retain their workforce. This study contributes to the existing literature and practice manuals by revealing that a transformational leadership style can reduce voluntary turnover through two main paths: by providing performance feedback and offering T&D opportunities. In particular, when good managers act as true transformational leaders and offer performance feedback to their subordinates, the latter perceive this as a form of recognition, concern, and career opportunity. In a similar vein, offering workers T&D opportunities enhances employees' KSAs and shows that their organization invests in their development and growth. As a result, employees feel a sense of job satisfaction, which, in turn, suppresses their turnover intention thereby boosting the quality and quantity of organizational human capital that enhances overall business performance.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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How to cite this article: Serenko, A., Abubakar, A. M., & Bontis, N. (2024). Understanding the drivers of organizational business performance from the human capital perspective. *Knowledge and Process Management*, 31(1), 48–59. <https://doi.org/10.1002/kpm.1763>