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From work motivation to innovative behavior of employees in enterprises

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Abstract: To ensure the survival and development of organizations in a dynamic and competitive environment, managers must seek new approaches to business management (AlEssa & Durugbo, 2021). This study aims to examine the impact of work motivation on employees' innovative behavior in Vietnamese enterprises through the mediating factors of psychological capital and transformational leadership style in the context of digital transformation. A quantitative research method was employed using structural equation modeling (SEM) analysis. Research data were collected through a survey of 476 employees working in enterprises that have implemented or are in the process of implementing digital transformation, including both state-owned and private enterprises. The findings indicate that work motivation not only has a direct and positive impact but also an indirect impact on employees' innovative behavior through the mediating factors of psychological capital and transformational leadership style. Additionally, the transformational leadership style was found to impact employees' psychological capital. These findings provide significant contributions to the literature. Based on these results, the study proposes several recommendations to enhance employees' innovative behavior in enterprises within the digital transformation context. This study is a useful reference for firms.

Keywords: *Digital transformation, Innovative behavior, Psychological capital, Transformational leadership style, Work motivation.*

1. Introduction

The international integration and globalization are characterized by the constant fluctuation of business market, in this meaning, innovation in enterprises has become critically important, particularly as enterprises seek to create new competitive advantages to counter the continuous rise of industry rivals. The survival and development of organizations in a dynamic and competitive environment has put managers in the position of exploring new approaches to their business management [1].

Individual motivation and an innovative environment have a significantly positive impact on employees' innovative behavior within organizations [2]. Work motivation is positively related to creative work behavior, significantly enhancing employees' performance and productivity [3, 4]. Intrinsic motivation plays a mediating role in the relationship between transformational leadership and employees' innovative behavior [5]. Creativity reflects greater proactivity at work and stimulates the innovation which followed-up by an effective work environment with minimal working risks and undesirable behaviors [6]. Numerous global studies highlight the critical role of individual creativity in organizational success Patterson and McDowell [7] and Hu, et al. [8]. Ortt and Van Der Duin [9] found that innovation reduces competitiveness in dynamic business environments. Today, companies

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must innovate to grow and are encouraged to develop their innovation activities through behavioral models [10]. A significant portion of creative ideas originates from employees' workplaces [11]. Transformational leadership style has a substantial and positive impact on employees' innovative behavior. Furthermore, employees' creative work effectiveness and leaders' support for innovation mediate the relationship between transformational leadership style and innovative work behavior [12]. The enterprise's innovation environment mediates the relationship between leadership style and innovative behavior [13]. Research by Zafar, et al. [14] indicates that an inclusive leadership style has strong impact on risk-taking behaviors such as innovation, with autonomous motivation serving as a positive intermediary in the relationship between leadership style and innovative behavior.

In reality, digital transformation has become an inevitable trend across most industries and sectors in Vietnam. The booming of digital transformation under the rapid advancement of science and technology has been significantly reshaping businesses of all types and fields. Enterprises can now access various resources more easily, and digital platforms have facilitated better connectivity among businesses, suppliers, and customers.

However, digital transformation efforts by Vietnamese enterprises still encounter numerous challenges. This is primarily due to the fact that most of the enterprises are small and medium-sized ones with limited technological capabilities; few businesses or individuals own technology patents, and must rely on pre-existing foreign technologies; moreover, the government's legal framework for e-government, digital transactions, and administrative procedures is still being refined, resulting in operational shortcomings. A fundamental factor for successful digital transformation and innovation within organizations remains underdeveloped as many enterprises are still grappling with how to promote employees' innovative behavior and capabilities to align with the global digital transformation landscape.

This study aims to examine the impact of work motivation on employees' innovative behavior in Vietnamese enterprises within the context of digital transformation. Its findings provide valuable insights, demonstrating that work motivation not only has a direct and positive impact but also exerts an indirect effect on employees' innovative behavior through the mediating factors of psychological capital and transformational leadership style. Additionally, transformational leadership style is shown to impact employees' psychological capital. These findings make significant contributions to the literature; on that basis, several recommendations are proposed to enhance employees' innovative behavior in enterprises amid the digital transformation era.

2. Literature Review and Hypotheses

2.1. Literature Review

2.1.1. Innovative Behavior

According to the OECD [15] innovation encompasses four categories: product innovation, process innovation, marketing innovation, and organizational innovation. Each form of innovation contributes to the operational efficiency of enterprises. Innovation is a key determinant of competitive capability, growth, profitability, and the creation of sustainable value for businesses [16, 17]. The World Intellectual Property Report [18] defines innovation as the process of generating new value through knowledge, technology, and creativity.

Kheng, et al. [19] discuss that individual creative capacity plays a central role in the long-term survival and development of organizations within the economy. Employee creativity is a primary driver of innovative behavior Slåtten and Mehmetoglu [20]. De Jong and Den Hartog [21] conceptualizes innovative behavior as the introduction of new ideas, processes, products, or procedures within the context of work, teams, or organizations. AlEssa and Durugbo [1] regard innovative behavior as a complex, multidimensional process in which employees actively generate and implement ideas through critical thinking, problem recognition, opportunity exploration, and the proposal of solutions and execution plans to enhance performance, create value, and help organizations achieve competitive

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advantages and sustainable development. This process typically unfolds in four stages: (1) Opportunity Exploration; (2) Idea generation; (3) Championing; and (4) Application.

2.1.2. Work Motivation

Work motivation is a set of attitudes and values that impact an individual's drive to achieve specific goals [22]. It is described as an internal force that affects the intensity, direction, and persistence of a person's voluntary behavior in performing tasks [23, 24]. According to Kinman [25] intrinsic motivation encompasses both cognitive and emotional components. Research suggests that individuals possess a drive for mastery (cognitive) and curiosity (emotional), with key factors associated with self-determination. In contrast, extrinsic motivation is linked to an individual's evaluation of anticipated outcomes.

Work motivation serves as an incentive for individuals to perform or complete tasks to the best of their ability in pursuit of achievement [26]. Understanding the factors that influence employees' motivation is crucial for contemporary organizations [27]. The findings of Buble, et al. [28] indicate that employee participation in decision-making is a key determinant of work motivation, fostering a sense of responsibility and additionally, material rewards are identified as a significant motivating factor.

2.1.3. Psychological Capital

Psychological capital is an inherent human trait and a positive psychological state that contributes to individual development Avey, et al. [29]. Luthans, et al. [30] define psychological capital as an individual's positive psychological development, which consists of four key components: confidence, hope, optimism, and resilience. In other words, psychological capital refers to an individual's level of positive thinking and mindset, which is closely linked to their personal growth. It is characterized by: (i) Confidence to take on and execute challenging tasks with the necessary effort to achieve success; (ii) An optimistic attitude toward present and future achievements; (iii) Perseverance in pursuing goals while demonstrating flexibility in adapting strategies to achieve success; and (iv) The ability to maintain, adapt, and overcome obstacles when facing adversity [4]. According to Luthans, et al. [30] psychological capital is a concept characterized by the followings: (i) It is rooted in the positive psychology model; (ii) It includes psychological states based on positive organizational behavior or criteria on positive organizational behavior; (iii) It extends beyond human capital and social capital to define "who you are"; (iv) It is linked to investment and development efforts that enhance work performance and create competitive advantages. The comprehensive concept of psychological capital, including its four components, has been supported by various empirical studies, notably by those of Larson and Luthans [31] and Luthans, et al. [32].

Throughout various stages of organizational development, research has highlighted a shift in the nature of capital, evolving from traditional economic capital to human capital, social capital, and ultimately psychological capital Jafri [33] of which psychological capital is the inherent human trait, and a positive psychological state that contributes to individual development [29]. The psychological capital, as discussed in various studies, fosters innovation within organizations by creating an environment conducive to change [33-35]. The identification of motivational factors and agents that drive individual creativity is essential for enhancing personal innovation capacity, as well as the creativity and success of organization [36].

2.1.4. Transformational Leadership

The theory of transformational leadership was introduced by Burns [37] who described transformational leaders as individuals who articulate a clear vision of the future, share this vision with employees, intellectually stimulate their workforce, and acknowledge individual differences among employees.

The success of leadership is demonstrated through managerial styles applied in the workplace [38]. A transformational leader plays a crucial role in enhancing employees' ability to perform specific tasks

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by implementing impactful management strategies that employees adopt [39]. Transformational leaders have an exceptional ability to foster organizational cohesion and achieve performance outcomes that exceed planned expectations, surprising all stakeholders with seemingly impossible efforts in ordinary circumstances [40].

2.2. Hypothesis

2.2.1. Work Motivation and Innovative Behavior

Motivation is one of the most critical factors which impact significantly employees' working behavior and determine their work output and effectiveness [38]. Although the relationship between work motivation and employee innovative behavior has been widely discussed in previous studies, research findings vary regarding this relationship vary. Devloo, et al. [41] found that intrinsic motivation is a key factor impacting employees' innovative behavior. Highly motivated employees are more likely to engage in creative work, and actively develop effective new methods for problem-solving [42, 43]. Motivation has a significant positive impact on employees' innovation behavior [44]. Conversely, in the study by Yu, et al. [45] the authors found that when the perception of the transfer environment is less favorable, work motivation has a weaker impact on innovative behavior, and transfer motivation plays a moderating role in the relationship between the transfer environment and innovative behavior. Digital transformation has become a key strategic priority for many countries in the near future. Thus, how does work motivation relate to innovative behavior in Vietnamese enterprises within the context of digital transformation? This study proposes the following hypothesis:

H_1: Work motivation has a positive impact on employees' innovative behavior in Vietnamese enterprises in the context of digital transformation.

2.2.2. Work Motivation and Psychological Capital

Psychological capital plays a crucial role in work motivation, as well as work approach and performance of employees [46]. Research by Ghimire, et al. [47] indicates that psychological capital factors, including hope, confidence, and optimism, significantly impact employee motivation, whereas resilience does not show a notable impact. Psychological capital positively impacts employees' intrinsic motivation within organizations [48]. Moreover, motivation serves as a mediating factor in the relationship between psychological capital and working performance [49]. To assess the impact of work motivation on employees' psychological capital in Vietnamese enterprises within the context of digital transformation, this study proposes the following hypothesis:

H_2: Work motivation positively impacts employees' psychological capital in Vietnamese enterprises in the context of digital transformation

2.2.3. Psychological Capital and Innovative Behavior

The study by Knezović and Drkić [50] suggests that psychological capital has a positive impact on employees' innovative behavior within organizations. To foster employees' innovative behavior, an organization must create an environment where employees have the opportunity to participate in decision-making processes, and the organization's work procedures must ensure fairness to cultivate a positive psychological state among employees. Employees' optimism enables them to trust themselves, courageously overcome challenges, achieve job satisfaction, and strive for success in all tasks [24, 51]. To examine the impact of psychological capital on employees' innovative behavior in enterprises in the current context of digital transformation, the study proposes the following hypothesis:

H_3: Psychological capital has a positive impact on employees' innovative behavior in Vietnamese enterprises in the context of digital transformation.

2.2.4. Employees' Work Motivation and Transformational Leadership Style

The study by Su, et al. [52] indicates that transformational leadership can enhance employees' innovative behavior and intrinsic motivation. Meanwhile, employees' intrinsic motivation mediates the

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relationship between transformational leadership and their innovative behavior. Furthermore, this mediating relationship depends on the moderating role of personal identification with the leader. Buble, et al. [28] identified the relationship between leadership style and employees' work motivation. Similarly, McCrie [53] also discussed the role of leadership style in supporting and encouraging supervisors and employees in the workplace through human resource policies and job satisfaction. To examine the impact of employees' work motivation on transformational leadership style in enterprises, the study proposes the following hypothesis:

H_4: Employees' work motivation positively impacts transformational leadership style in Vietnamese enterprises in the context of digital transformation.

2.2.5. Transformational Leadership Style and Innovative Work Behavior

So far, numerous studies have explored the relationship between transformational leadership style and work performance, with many of them yielded conflicting results, as seen in the works of Dvir, et al. [54], Katsikeas, et al. [55], and Chalkiti [56]. According to Araz, et al. [57] transformational leadership style is positively correlated with employees' creative work behavior. Similarly, research by Afsar and Umrani [58] indicates that transformational leadership has a positive impact on both employees' innovative behavior and work motivation. Transformational leadership directly and positively influences employees' innovative work behavior [59].

Conversely, a study by Yeap [60] suggests that leadership style does not have a direct impact on creative work behavior. However, intrinsic motivation and proactive personality serve as mediators in the relationship between leadership style and creative work behavior. Meanwhile, Yesil and Sozbilir [61] argue that only openness to experience has a positive impact on employees' creativity in the workplace. Given the context of digital transformation in Vietnamese enterprises, whether the transformational leadership impact employees' innovative behavior, the study proposes the following hypothesis:

H_5: Transformational leadership style positively impacts employees' innovative behavior in Vietnamese enterprises in the context of digital transformation.

2.2.6. Transformational Leadership Style and Psychological Capital

Pham, et al. [62] highlight the crucial role of person-organization fit as a mediating factor in the relationship between work motivation, transformational leadership, and innovative work behavior. Additionally, creative work behavior and psychological empowerment act as mediators in the impact of transformational leadership on work performance.

Leadership is an art - Arshad, et al. [63] argue that effective managers should have focused on listening, relationship-building, teamwork, inspiring, motivating, and persuading their employees. Hoxha [64] found that transformational leadership style has a positive impact on employees' performance. Nguyen, et al. [65] emphasize the importance of practicing transformational leadership to nurture and enhance both employees' positive psychological state and their capacity for innovation and creativity within enterprises. Based on these findings, the study proposes the following hypothesis:

H_6: The transformational leadership style positively impacts the psychological capital of employees within Vietnamese enterprises in the context of digital transformation.

Based on the above analysis, we propose the following research model (see Figure 1).

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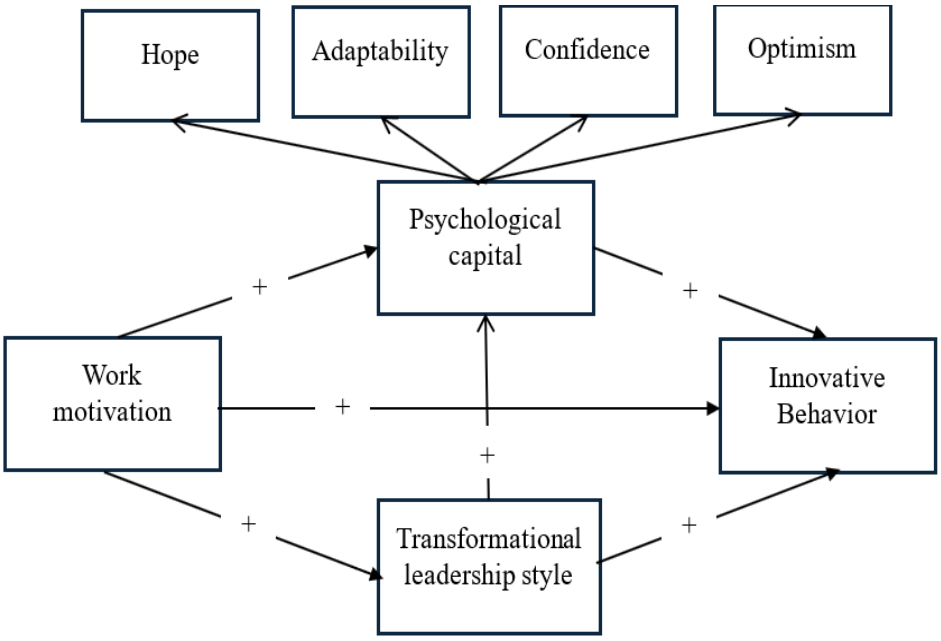

Figure 1.
The proposed research model.

3. Research Methodology

3.1. Research Scale

Based on the theoretical review and relevant studies, this research proposes a model with four variables (see Table 1). The independent variable is employees' work motivation, measured by five indicators; while the dependent variable is innovative work behavior, also measured by five indicators. The mediating variables include psychological capital—comprising hope (five indicators), adaptability (four indicators), confidence (four indicators), and optimism (four indicators)—as well as transformational leadership style, measured by six indicators. The study employs a five-point Likert scale, with response options ranging from 1 to 5 (1 - Strongly Disagree; 2 - Disagree; 3 - Neutral; 4 - Agree; 5 - Strongly Agree). The measurement indicators for each variable have been adapted from previous studies to align with the characteristics of the research sample.

Table 1.
Origin of the scale of variables.

No.	Variable	Symbol	Number of observations	Origin of scale
1	Working motivation	MOT	5	Steers and Porter [66]
2	Psychological capital	PSY	17	Luthans, et al. [30]
	Hope	HOP	5	
	Adaptability	ADA	4	
	Confidence	CON	4	
	Optimism	OPT	4	
3	Transformational leadership style	TRL	6	Burns [37]
4	Innovative behavior	TNN	5	Hu, et al. [8] and Kheng, et al. [19]

3.2. Research Samples

The research context contoured enterprises that have been implementing and adopting digital transformation technologies in their production, business, and corporate management activities, including both state-owned enterprises and private sector businesses. Due to the uneven regional

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distribution of the sample and to facilitate data collection, the study employs a non-probability sampling method, specifically convenience sampling. Data collection is conducted using a relatively stratified sampling approach across different localities, covering all three regions of Vietnam: North, Central, and South.

The respondents of the investigation are employees currently working in enterprises. Data collection is carried out through both direct hand-out of questionnaires and online surveys using Google Forms. Regarding the direct distribution, 300 questionnaires were distributed, 269 were returned, and 221 were deemed valid. Regarding the online survey, 300 questionnaires were sent out, 272 were returned, and 255 were valid. The total number of valid responses used for analysis is 476. Based on guidelines provided by Hair, et al. [67] on expected sample size, the minimum required sample size should be at least five times the total number of observed variables. With 33 observed variables in this study, the sample size of 476 meets the analytical requirements. The data collection period for this study spans from February 2024 to November 2024.

Among the 476 collected responses, 257 were from male employees (53.99%), while 219 were from female employees (46.01%). The number of employees working in state-owned enterprises was 109 (22.90%), whereas those who work in private sector enterprises accounted for 367 respondents (77.10%) (see Table 2).

Table 2.
Sample characteristics.

Characteristic	Quantity	Percentage (%)
Gender		
Male	257	53.99
Female	219	46.01
Type of enterprise		
State-own enterprises	109	22.90
Private sector enterprises	367	77.10

3.3. Data Processing

Using a quantitative research approach, the collected and cleaned data is processed through SPSS 22.0 and AMOS 22.0 software. The data processing procedure consists of the following steps:

Firstly, the study evaluates the reliability of the measurement scale using SPSS with the requirements of a Cronbach's Alpha value > 0.7 and an item-total correlation coefficient > 0.3. Additionally, if the Cronbach's Alpha If Item Deleted value is higher than the overall Cronbach's Alpha coefficient, the observed variable should be considered for removal [67].

Secondly, an exploratory factor analysis (EFA) is conducted to assess the convergent and discriminant validity of the measurement scale. The analysis requires a factor loading > 0.5, a Kaiser-Meyer-Olkin (KMO) coefficient between 0.5 and 1, a significance level (Sig.) < 0.05, and an extracted variance percentage > 50% [67]. If any indicator is eliminated, the reliability of the variable containing that indicator will be reassessed to ensure the consistency of the measurement scale.

Thirdly, confirmatory factor analysis (CFA) is performed using AMOS to evaluate the model fit and to provide precise indicators for evaluating model fit and offers compelling evidence of the convergent and discriminant validity of the theoretical construct.

Finally, structural equation modeling (SEM) will be employed to test the proposed hypotheses.

The CFA and SEM testing criteria include a chi-square/df < 3 [67]; P < 0.05; GFI, TLI, CFI > 0.8 [68]; RMSEA < 0.05 [69].

4. Research Results and Discussion

4.1. Testing The Reliability of the Scale

The reliability assessment of the measurement scale for the variables in the model indicates that the Cronbach's Alpha coefficient for all variables exceeds 0.7, while the item-total correlation coefficients for

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all observed variables are greater than 0.3 (see table 3). Additionally, the Cronbach's Alpha If Item Deleted values for all observations are lower than the overall Cronbach's Alpha of the respective variables. These results demonstrate the reliability of the measurement scale and the validity of the data used for analysis in the research model.

Table 3.
Evaluate the reliability of the scale through Cronbach's alpha coefficient.

No.	Variable	Symbol	Cronbach's alpha
1	Work motivation	MOT	0.909
2	Psychological capital	PSY	
	Hope	HOP	0.868
	Adaptability	ADA	0.802
	Confidence	CON	0.911
	Optimism	OPT	0.916
3	Transformational leadership style	TRL	0.922
4	Innovative behavior	TNN	0.941

4.2. Exploratory Factor Analysis (EFA)

Following the reliability assessment of the measurement scales, which confirmed their appropriateness and reliability, the study proceeded with Exploratory Factor Analysis (EFA). The EFA process was conducted in two iterations: the first iteration applied to all independent and mediating variables, while the second iteration focused on the dependent variable.

The results from both iterations indicate that the data meets the required conditions, ensuring the appropriateness and eligibility for further analysis as the factor loadings > 0.5, the KMO coefficient >= 0.5, the significance value (Sig.) < 0.05 (see table 4), and the extracted variance percentage was above 50%. Moreover, the analysis satisfied both the convergent validity condition (observed variables converging on the same factor) and the discriminant validity condition (observed variables belonging to one factor are distinguishable from those of another factor).

Table 4.
Exploratory Factor Analysis Results.

EFA analysis	KMO coefficient	P-value	Variance extracted	Factor loading	Conclusion
Independent and mediating variables	0.920	0.000	72.698	All coefficients > 0.5	Meet requirements
Dependent variable	0.905	0.000	81.108	All coefficients > 0.5	Meet requirements

4.3. Confirm Factor Analysis (CFA)

After assessing the reliability of the measurement scales and conducting EFA, the study employed AMOS software to perform CFA to verify the reliability and appropriateness of the measurement model with the observed data while also provide precise fit indicators to confirm the model's appropriateness and establish the measurement models

The CFA results indicate that the measurement model aligns well with the observed data. Specifically, Chi-square = 997.032; df = 474; P = 0.000 (< 0.05); Chi-square/df = 2.103 (< 3); GFI = 0.883 (> 0.8); TLI = 0.950 (> 0.8); CFI = 0.955 (> 0.8); and RMSEA = 0.048 (< 0.05).

4.4. Structural Equation Modeling Analysis (SEM)

To test the research hypotheses, the study conducted Structural SEM analysis (see figure 1). The results indicate that the overall fit indices meet the required thresholds. Specifically, the Chi-square = 1033.017; df = 485; P = 0.000 (< 0.05); Chi-square/df = 2.130 (< 3); GFI = 0.880 (> 0.8); TLI = 0.949 (> 0.8); CFI = 0.953 (> 0.8); RMSEA = 0.049 (< 0.05).

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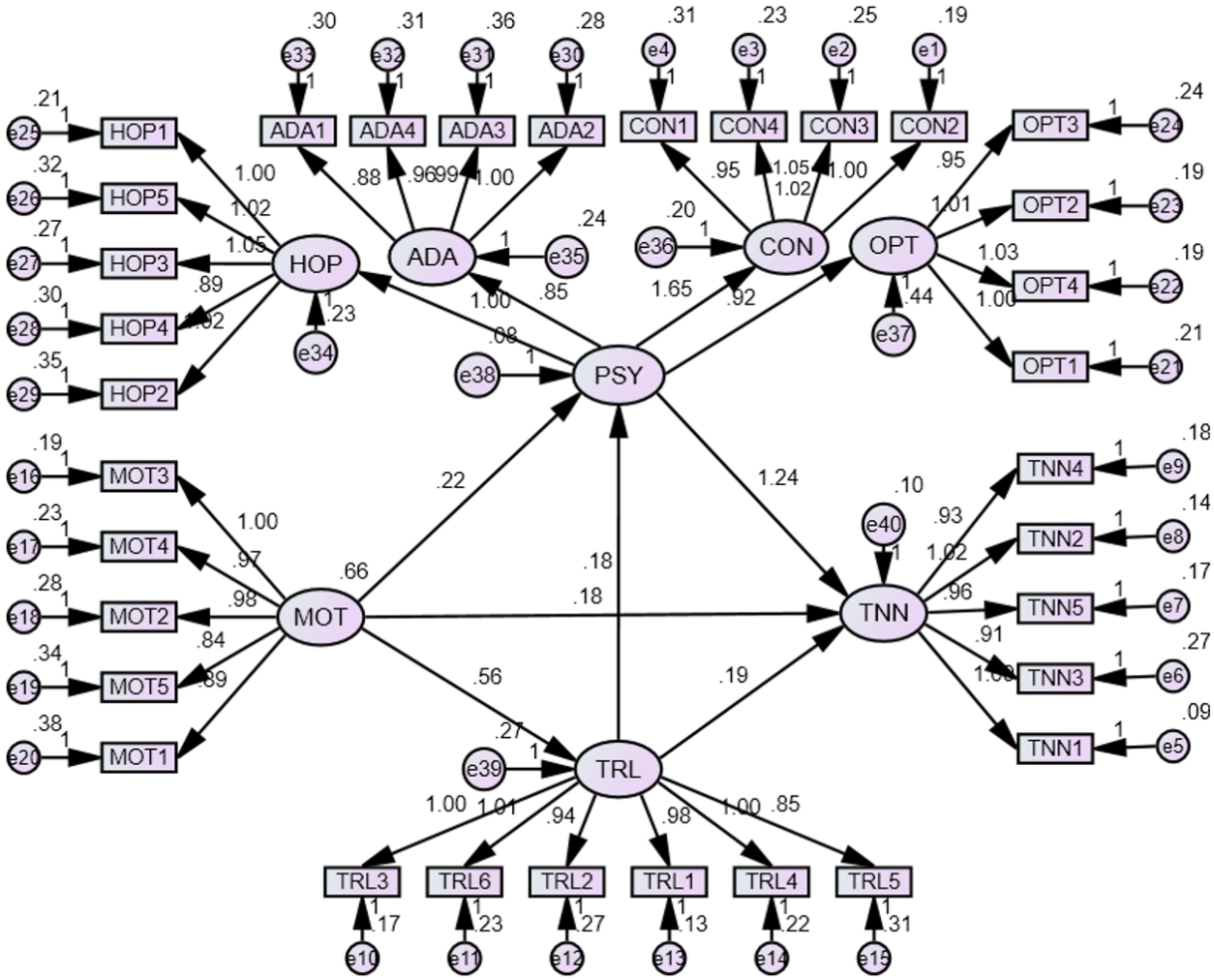

Figure 2.
SEM model analysis.

The estimation results of the relationships in the model indicate that the research model is appropriate. All hypotheses from H1 to H6 are accepted at a significance level of $P < 0.05$, with positive regression coefficients (see table 5).

Specifically, hypothesis H1 is accepted at a significance level of $P < 0.05$, with a regression weight of 0.183 (> 0). Therefore, it can be concluded that work motivation has a positive impact on employees' innovative behavior in Vietnamese enterprises within the context of digital transformation. This result is consistent with the studies of Liaw, et al. [42]; Devloo, et al. [41]; Woolley and Fishbach [43]; Usmanova, et al. [44]; Yu, et al. [45]; [38].

Hypotheses H2 and H3 are also accepted at a significance level of $P < 0.05$, with regression weights of 0.216 and 1.241 (> 0), respectively. This indicates that work motivation positively impacts employees' psychological capital, and psychological capital, in turn, positively impacts employees' innovative behavior in Vietnamese enterprises within the context of digital transformation. In other words, psychological capital serves as a mediating factor in the relationship between work motivation and innovative behavior. These conclusions align with the findings of previous studies by Icekson, et al. [51]; Zhang, et al. [24]; Knezović and Drkić [50]; Liu, et al. [46]; Ali, et al. [48]; Ghimire, et al. [47] and Shaheen, et al. [49].

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Similarly, hypotheses H4 and H5 are accepted at a significance level of $P < 0.05$, with positive regression weights. This demonstrates that transformational leadership is also proven to act as a mediator in the relationship between work motivation and employees' innovative behavior. This conclusion represents a significant contribution to the research, as most previous studies have emphasized the impact of transformational leadership on employees' work motivation, whereas the reverse relationship has been less explored.

Additionally, with the acceptance of hypothesis H6, the research findings indicate that transformational leadership positively impacts employees' psychological capital in Vietnamese enterprises amid digital transformation. This result aligns with the conclusions of previous studies by Arshad, et al. [63]; Hoxha [64]; Nguyen, et al. [65] and Pham, et al. [62].

Table 5.
Results of SEM analysis for relationships in the model

Hypothesis	Relationship	Weightage	S.E.	C.R.	P	Conclusion
H1	TNN <--- MOT	0.183	0.047	3.871	0.000	Accepted
H2	PSY <--- MOT	0.216	0.035	6.106	0.000	Accepted
H3	TNN <--- PSY	1.241	0.144	8.650	0.000	Accepted
H4	TRL <--- MOT	0.564	0.039	14.657	0.000	Accepted
H5	TNN <--- TRL	0.185	0.051	3.661	0.000	Accepted
H6	PSY <--- TRL	0.176	0.039	4.499	0.000	Accepted

Thus, with the acceptance of all six hypotheses proposed in the initial model, the research findings provide significant contributions to both theoretical and practical perspectives. Theoretically, the study not only confirms the direct and positive impact of work motivation on employees' innovative behavior in enterprises but also demonstrates the mediating roles of both psychological capital and transformational leadership in this relationship. Practically, these findings serve as valuable reference for policymakers and business managers, helping them recognize the crucial factors that influence employees' innovative behaviors in a positive direction. This understanding, in turn, provides a basis for developing appropriate strategies and solutions tailored to specific business contexts.

5. Conclusions and Recommendations

5.1. Conclusions

Based on the literature review and relevant studies, this paper proposes a model and examines the impact of work motivation on employees' innovative behavior in Vietnamese enterprises amid digital transformation. The findings highlight the significant contributions of this study by demonstrating that work motivation not only has a direct and positive effect on innovative behavior but also an indirect impact through the mediating roles of psychological capital and transformational leadership. Furthermore, transformational leadership is also proven to impact employees' psychological capital.

5.2. Recommendations

Based on the research findings, the study proposes several recommendations to strengthen employees' innovative behavior within Vietnamese enterprises in the context of digital transformation:

Firstly, regarding employees' work motivation, enterprises should implement policies that foster motivation based on fairness in procedures, outcomes, and interpersonal treatments. Management policies should be developed with continuous attention to and alignment with employees' legitimate needs. Additionally, businesses must foster the long-term engagement of employees to the enterprise, and establish a work environment that encourages innovation, and enable employees to maximize their potential, which follow-up by enhancing job attractiveness and perceived work significance.

Secondly, concerning employees' psychological capital, enterprises should introduce policies that support employees in their work processes, enhance adaptability, and foster confidence, optimism, and enthusiasm. Organizations should encourage employees to develop professional competencies and

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vocational skills through appropriate performance evaluations and provide opportunities for training and career development. Discrimination should be avoided in all aspects of management and labor policies, from recruitment, labor relations, and benefits. Simultaneously, enterprises should prioritize employees' well-being, both materially and mentally, by creating a safe, healthy, and productive working environment.

Thirdly, regarding transformational leadership, enterprises' managers should actively cultivate leadership styles tailored to specific contexts, and encourage employees to engage in innovation, propose novel ideas, actively propose new ideas and develop feasible solutions. Furthermore, enterprises should allocate resources, including financial support, time, and appropriate tools, to assist employees in implementing their ideas effectively.

5.3. Limitations and Future Research

In addition to its valuable conclusions, this study also has certain limitations. Firstly, due to the uneven regional distribution of sample and for convenience in data collection, a non-probability sampling method (convenience sampling) was employed. This approach limits the representativeness and generalizability of the research sample. Secondly, beyond the two mediating factors examined in the model - psychological capital and transformational leadership - it is necessary to explore the impact of work motivation on employees' innovative behavior through other potential mediating or moderating variables. Furthermore, the study's scope is confined to enterprises in Vietnam. Given the rapid, widespread, and global nature of digital transformation, future research should extend this investigation to enterprises of varying scales across various countries in the region and worldwide.

Institutional Review Board Statement:

The Ethical Committee of the Faculty of Business Administration - School of Economics at Vinh University for this research on July 20, 2024 (Ref. No. 68/XNDD-QTKD-KT-DHV).

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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