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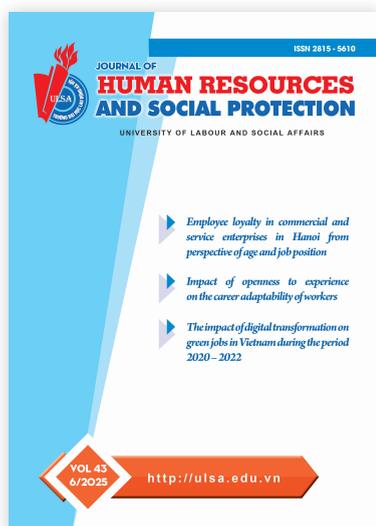
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- ▶ *Employee loyalty in commercial and service enterprises in Hanoi from perspective of age and job position*
- ▶ *Impact of openness to experience on the career adaptability of workers*
- ▶ *The impact of digital transformation on green jobs in Vietnam during the period 2020 – 2022*

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EMPLOYEE LOYALTY IN COMMERCIAL AND SERVICE ENTERPRISES IN HANOI FROM PERSPECTIVE OF AGE AND JOB POSITION

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Abstract: This article explores employee loyalty from two viewpoints: age and job position, utilizing data gathered from 329 individuals working in commercial and service enterprises in Hanoi. The analysis was conducted using SPSS 26 software. The findings indicate notable variations in employee loyalty among different age groups, while no significant differences were observed concerning job positions. Employees younger than 30 exhibited lower loyalty levels in comparison to those aged 30 to under 40 and those aged 50 and older. In light of these results, the authors recommend that commercial and service enterprises formulate human resource management strategies that are customized to the specific characteristics of each employee age group.

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1. Introduction

Employee loyalty plays a vital role in the success and sustainable development of any organization, especially in the current highly competitive business landscape. Loyalty among employees not only aids companies in retaining their talent but also improves work performance, decreases turnover rates, and contributes to the formation of a dedicated and committed workforce. In the commercial and service industries where the competition for human resources is particularly fierce, grasping the elements that affect employee loyalty, such as age and job position, becomes crucial. Therefore, this article examines the connection between employee age, job position, and loyalty, while providing

recommendations for effective human resource management.

2. Literature review

Employee loyalty

Since the 1970s, scholars in human resource management have examined employee loyalty towards organizations. Among the prominent contributions is that of Buchanan (1974), who characterized loyalty as the employee's emotional connection to the organization. Loyalty is perceived as a component of the relationship between the individual and the organization. A loyal employee is defined as one who intends or desires to continue being a member of the organization (Mowday, Steers, & Porter, 1982). Following this, Mathieu

and Zajac (1990) articulated loyalty as the level of attachment to the organization, which can be viewed as an emotional response-especially when an employee aligns with the organization's goals and values and possesses a strong wish to retain membership. Subsequent research by Niehoff et al. (2001); Hasibuan (2005); Kot-Radojewska and Timenko (2008); Mehta et al. (2010); Korkki (2011); and Li Chen (2020), among others, has further elucidated the expressions of loyalty and identified traits of loyal employees. These studies indicate that employee loyalty is reflected in their attachment to the company, as well as their commitment and dedication to their work. Employee loyalty can be assessed through various indicators, including turnover rates, job satisfaction, organizational commitment, work performance, and involvement in company-wide initiatives. Loyal employees often exhibit behaviors such as prolonged tenure with the organization, a low likelihood of job changes, and a propensity to offer innovative ideas for the advancement of the organization.

From the standpoint of attachment and commitment, the term loyalty is frequently used synonymously with one or more types of commitment. As per the research conducted by Allen and Meyer (1990), employee loyalty can be categorized into three primary forms of commitment: affective commitment, continuance commitment, and normative commitment. Each form of commitment signifies a distinct level of attachment to the organization.

Employee loyalty is demonstrated through trust in the organization, a profound sense of attachment, and a dedication to develop alongside the company, even when faced with more appealing salary offers from other sources. In this research, the authors examine employee loyalty via indicators such as pride in advocating for the company and its products, the readiness to recommend the workplace to others, long-term dedication, the resolve to surmount challenges in order to complete tasks, and alignment with the organization's collective objectives.

Specifically, in the commercial and service industries where employee turnover rates are generally elevated, loyalty is essential for sustaining

service quality, team cohesion, and customer involvement. As a result, retaining loyal employees poses a considerable challenge for businesses operating within these sectors.

The relation between the age of employees and their loyalty

The connection between the age of employees and their loyalty has been analyzed from multiple viewpoints in existing literature. Numerous studies indicate that older employees are likely to demonstrate higher loyalty to their organizations due to their long-standing attachment, limited opportunities for job changes, and a greater appreciation for stability and benefits (Ng & Feldman, 2010; Kooij et al., 2012; Strenitzerová & Achimský, 2019; Alsaiani et al., 2020). These older employees frequently find their positions to be well-suited to their skills and experiences, leading to stronger emotional bonds with the organization.

Nonetheless, there exists the perspective that employees possessing robust work skills are presented with greater career prospects, which could result in their departure from the organization if the existing work environment fails to satisfy their expectations or personal growth requirements. For instance, research by Ineson et al. (2013) in Hungary indicated that employee loyalty could diminish with age, as older employees often have more alternatives and increased flexibility in the job market. Moreover, a study carried out in Ho Chi Minh City focusing on Generation Z employees (aged 22-28) uncovered that elements such as workplace relationships, income, and acknowledgment are the key factors influencing loyalty, rather than age disparities within this generational group.

Furthermore, researchers like Allen and Meyer (1990) highlight the significance of affective commitment where senior employees feel a bond with the organization not solely for financial incentives but also due to emotional ties and a sense of duty towards the company.

In conclusion, while numerous studies support a favorable correlation between age and employee loyalty, this correlation is not entirely linear. Employee loyalty is shaped by multiple factors, such as work environment, remuneration and benefits, chances for growth, and the extent of alignment between the individual and the organization.

The Connection Between Employee Loyalty and Job Position

An employee's job position serves as a crucial element affecting their loyalty levels. Research conducted by Meyer and Allen (1991) regarding the influence of job-related factors on employee commitment demonstrated that individuals in higher-ranking roles often show a stronger attachment to the organization. This attachment arises from their belief that their positions significantly contribute to the company's growth. Additionally, Griffith, Hom, and Gaertner (2000) compiled various predictors of employee turnover, highlighting job position as a significant factor. Their research indicated that employees in positions that offer greater challenges and opportunities for advancement are typically more likely to maintain their loyalty to the organization.

Harrison (2013) emphasized a positive relationship between employee loyalty and job position. As an individual's professional level increases, their loyalty tends to rise as well. This is primarily due to the considerable effort often necessary to achieve such positions, which makes employees less likely to depart or surrender their roles to others. Nevertheless, the study also indicated a negative correlation between employee loyalty and higher-level job positions when employees view certain evaluation criteria as potentially biased, especially concerning incentive systems and the allocation of bonuses and salaries. Such perceptions can negatively impact employees' sense of organizational commitment and reduce their loyalty to the organization.

Geevarghese et al. (2018) stated that demographic factors such as age, job title, and tenure significantly affect employee loyalty, with individuals in higher-ranking roles and those with longer seniority generally showing increased loyalty. In addition to age, Strenitzerová and Achimský (2019) highlighted that both job title and seniority play a crucial role in influencing employee loyalty. Employees in elevated positions or with longer seniority usually display higher loyalty levels. Likewise, in their examination of how demographic factors impact human resource management practices and their effect on employee loyalty, AbdulQader Alsaiani et al. (2020) confirmed that employees in senior management positions or roles with greater responsibilities tend to show

significantly higher loyalty compared to those in manual labor positions or roles with limited advancement opportunities.

Consequently, both qualitative and quantitative analyses reveal that individuals in leadership roles, expert positions, or highly specialized jobs generally show increased levels of loyalty. This phenomenon can be attributed to the enhanced opportunities for career progression and improved benefits linked to these positions. In contrast, employees occupying lower-tier roles such as factory workers, sales personnel, or positions that do not necessitate advanced expertise tend to exhibit diminished loyalty, as their jobs are more readily replaceable and provide fewer opportunities for professional growth.

The connection between employee loyalty and job position is clearly observable. Employees occupying leadership roles or critical positions within an organization frequently exhibit elevated levels of loyalty, as they view themselves as having a greater stake in the success of the company. These individuals generally receive higher salaries and more extensive benefits, which complicates and increases the risks associated with job changes. Conversely, employees in lower-tier or temporary roles may display lower loyalty, as their positions are more readily replaceable and provide fewer chances for career progression.

The intersection of age and job position

The connection between age and job position is vital in shaping employee loyalty. Older employees occupying managerial or specialist roles frequently demonstrate remarkably high levels of loyalty, attributed not only to their vast experience but also to their enduring commitment to the organization. In contrast, younger employees in entry-level positions or those facing limited advancement opportunities may exhibit lower loyalty levels, despite their enthusiasm and vigor in their roles. Saks (2006) emphasized that the interplay of age and job position significantly impacts employee loyalty. For example, older employees in managerial or expert positions are likely to display strong loyalty, having dedicated substantial time and effort to the organization and feeling a deep sense of obligation towards its success. The research also indicated that younger employees in leadership positions often show greater loyalty than their counterparts in lower-level roles. Conversely, younger employees in less advanced positions may be

less dedicated due to insufficient promotion prospects or job security. Nevertheless, by implementing a clear career development strategy, organizations can effectively boost the loyalty of younger employees.

The differences among various job position groups suggest that individuals in senior roles, regardless of age, typically exhibit greater loyalty. This pattern is especially noticeable in commercial and service-based organizations, where the influence of senior managers is vital in developing and implementing business strategies.

3. Research methodology

This research utilizes statistical testing techniques through SPSS 26 software to assess variations in employee loyalty among groups differentiated by age and job roles within commercial and service-oriented organizations. In particular, the study comprises two primary testing phases:

Assessing homogeneity of variances among employee groups: Prior to analyzing the differences in mean values, we utilized Levene’s Test for Equality of Variances to determine if the variances across the groups were homogeneous. In instances where heterogeneity of variance was identified, the Welch test was utilized in place of the conventional ANOVA. The Welch test is particularly designed to assess differences in means when the assumption of equal variances is not met.

Evaluating variations in mean values across employee categories: Following the identification of unequal variances, we employed the Welch test to evaluate the differences in employee loyalty among the different groups. Additionally, to carry out a more comprehensive analysis, we conducted a One-way ANOVA to compare loyalty differences among employee groups according to their job positions.

Furthermore, descriptive statistical analysis techniques were utilized in the study to fulfill the research objectives.

The enterprises surveyed were chosen from the commercial and service sectors located in Hanoi. Questionnaires were administered to employees who are currently employed at these organizations. A combination of convenience sampling and snowball sampling techniques was utilized, along with both direct distribution and online surveys, to achieve the necessary sample size. Consequently, 130 responses were gathered through direct distribution and 204 via the online survey. In total, 334 questionnaires were submitted, of which 329 were considered valid (representing 98.5%). All valid responses adhered to quality standards and were representative, rendering them appropriate for analysis.

4. Research findings

4.1. Descriptive statistics and mean difference testing on employee loyalty by age

The descriptive statistics regarding age reveal that 234 respondents (71.1%) were below 30 years of age, with this demographic displaying the lowest average loyalty score of 3.7193. The age group of 30 to under 40 comprised 41 individuals (12.5%) and achieved a mean loyalty score of 4.2586. The cohort aged 40 to under 50 consisted of 40 individuals (12.2%) with a mean score of 3.9224. The segment of individuals aged 50 and above constituted the smallest percentage at 4.2% yet demonstrated the highest mean loyalty score of 4.5. Therefore, regarding average loyalty across age groups, employees aged 50 and above exhibited the highest mean loyalty, followed by those aged 30 to under 40, then those aged 40 to under 50, with employees under 30 years old showing the lowest loyalty levels.

Table 1. Results of descriptive statistics

Indicator	Quantity (N)	Ratio %	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Under 30 years old	234	71.1	3.7193	0.60343	0.04615	3.6282	3.8104
From 30 to under 40 years old	41	12.5	4.2586	0.84379	0.15669	3.9377	4.5796
From 40 to under 50 years old	40	12.2	3.9224	0.86629	0.16087	3.5929	4.2519
Individuals aged 50 years and older	14	4.2	4.5000	0.70711	0.22361	3.9942	5.0058
Total	329	100	3.8421	0.70852	0.04583	3.7518	3.9323

Source: Compiled from the research team’s survey results

The outcomes of the variance difference test across various age groups commence with the evaluation of variance homogeneity. Levene's test

is employed, and the data cited are derived from the "Based on Mean" row in Table 2.

Table 2. Examination of variance homogeneity

		Levene test	df1	df2	Sig.
Loyalty of employees	Based on Mean	7.173	3	235	0.000
	Based on Median	4.956	3	235	0.002
	Based on Median and with adjusted df	4.956	3	171.100	0.003
	Based on trimmed mean	6.994	3	235	0.000

Source: Output generated by SPSS 26 software

The outcome for "Based on Mean" reveals Sig. = 0.000 < 0.05. This suggests a statistically significant difference in the variance of employee loyalty across the various age groups. Consequently, the results of

the Welch test displayed in the "Robust Tests of Equality of Means" (Table 3) will be utilized for additional analysis.

Table 3. Robust Tests of Equality of Means

	Statistic ^a	df1	df2	Sig.
Welch	7.025	3	30.224	0.001

a. Asymptotically F distributed

Source: Output generated by SPSS 26 software

The result of the Welch test indicates Sig. = 0.001 < 0.05. This suggests that there is a statistically significant difference in the average level of employee loyalty among various age groups. Consequently, employee loyalty differs among employees belonging to different age categories.

To ascertain which age group pairs demonstrate notable differences in mean values, a post hoc analysis employing One-way ANOVA was performed to identify the specific age groups that differ from each other.

Table 4. Post Hoc comparison

Dependent Variable: employee loyalty

(I) Age Group	(J) Age Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Under 30	30 to under 40	-0.53932*	0.16334	0.014	-0.9964	-0.0823
	40 to under 50	-0.20312	0.16735	0.797	-0.6716	0.2654
	50 and above	-0.78070*	0.22832	0.040	-1.5299	-0.0315
30 to under 40	Under 30	0.53932*	0.16334	0.014	0.0823	0.9964
	40 to under 50	0.33621	0.22456	0.595	-0.2763	0.9487
	50 and above	-0.24138	0.27304	0.947	-1.0447	0.5619
40 to under 50	Under 30	0.20312	0.16375	0.797	-0.2654	0.6716
	30 to under 40	-0.33621	0.22456	0.595	-0.9487	0.2763
	50 and above	-0.57759	0.27546	0.263	-1.3854	0.2303
50 and above	Under 30	0.78070*	0.22832	0.040	0.0315	1.5299
	30 to under 40	0.24138	0.277304	0.947	-0.5619	1.0447
	40 to under 50	0.57759	0.27546	0.263	-0.2303	1.3854

* The mean difference is significant at the 0.05 level.

Source: Output generated by SPSS 26 software

In the “Mean Difference (I-J)” column, the figures represent the magnitude of the difference between the means and identify which group has the higher average. The Mean Difference is determined by subtracting the mean of group J from the mean of group I. Consequently, a negative Mean Difference (-) suggests that the mean of group I is less than that of group J. In contrast, a positive Mean Difference (+) indicates that the mean of group I exceeds the mean of group J.

The test results indicating the differences in employee loyalty across various age group pairs reveal that the pair consisting of “Under 30 years old” and “From 30 to under 40 years old” has $\text{Sig.} = 0.014 < 0.05$. Additionally, the pair “Under 30 years old” and “50 years old and above” shows $\text{Sig.} = 0.04 < 0.05$. Consequently, there exists a statistically significant difference in employee loyalty between these specific age group pairs. The Mean Difference values for the “Under 30” group in comparison to both the “30 to under 40” and the “50 and above” groups are negative (-), signifying that employees under 30 exhibit lower loyalty than their counterparts aged 30 to under 40 and those aged 50 and above. In essence, employees aged 30 to under 40 and those 50 and above display significantly greater loyalty than those under 30.

Regarding the other age group pairs, the significance values are all above 0.05, indicating that, according to the survey data gathered, there is no statistically significant difference in employee loyalty among these additional age groups.

4.2. Analysis of descriptive statistics and mean difference testing regarding employee loyalty based on job position

Descriptive statistics regarding job positions indicate the following: 34 employees (10.3%) occupied unskilled roles that do not necessitate formal training, and this group exhibited the lowest mean loyalty score of 3.65. The most substantial group comprised 240 employees (73.0%) in trained positions within various departments or units, achieving a mean loyalty score of 3.842. Middle management roles were represented by 34 individuals (10.3%) and recorded the highest average loyalty score of 4.11. The smallest cohort was senior management, consisting of 21 employees (6.4%) with a mean loyalty score of 3.7167. Therefore, in the evaluation of employee loyalty according to job position, middle managers demonstrated the highest mean loyalty, followed by trained personnel in departmental roles. Senior managers were ranked third, while unskilled laborers had the lowest average loyalty score.

Table 5. Descriptive statistics regarding job positions

Indicator	Sample Size (N)	Percentage (%)	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Unskilled labor employees	34	10.3	3.6500	0.86301	0.17260	3.2938	4.0062
Employees with training in departments, divisions	240	73.0	3.8420	0.66020	0.05005	3.7432	3.9407
Direct supervisors (middle managers)	34	10.3	4.1100	0.85416	0.17083	3.7574	4.4626
Senior managers	21	6.4	3.7167	0.63994	0.16523	3.3623	4.0711
Total	329	100	3.8421	0.70852	0.04583	3.7518	3.9323

Source: Output generated by SPSS 26 software

The “Mean Value” column in Table 5 reveals that, within commercial and service enterprises in Hanoi, individuals in middle management roles demonstrate the highest degree of loyalty. This indicates a significant inclination to remain with the organization over the long term and to commit fully

to its sustainability and growth. The average loyalty score for this demographic is considerably greater than that of the other categories. Conversely, employees in unskilled roles that do not necessitate formal training face a higher likelihood of departing from the company. To substantiate this finding,

additional tests were performed namely the Levene test for assessing the homogeneity of variances among job position categories, and the Welch

test for evaluating mean differences across these categories.

Table 6. Examination of variance homogeneity

		Levene Statistic	df1	df2	Sig.
Employee loyalty	Based on Mean	3.709	3	235	0.012
	Based on Median	3.101	3	235	0.027
	Based on Median and with adjusted df	3.101	3	228.027	0.028
	Based on trimmed mean	3.653	3	235	0.013

Source: Output generated by SPSS 26 software

The result labeled “Based on Mean” presents Sig. = 0.012 < 0.05. This suggests that there is a statistically significant difference in the variances of employee loyalty across various job position groups.

Consequently, the assumption of equal variances is invalid, necessitating the use of the Welch test for subsequent analysis.

Table 7. Robust test of equality of means

	Statistic ^a	df1	df2	Sig.
Welch	1.373	3	37.271	0.266

a. Asymptotically F distribut

Source: Output generated by SPSS 26 software

The result of the Welch’s t-test indicates a significance value of 0.266, which exceeds 0.05. This suggests that there is no statistically significant difference in employee loyalty across the various job position groups. Consequently, it can be inferred that employee loyalty does not significantly vary among different job positions.

4.3. Results of mean difference tests between employee loyalty by age and job position

The One-way ANOVA analysis presented in

Section 4.1 indicated that there are significant differences in employee loyalty among various age groups. Nevertheless, no notable difference in loyalty was observed across different job positions. This prompts the inquiry: when evaluating both age and job position at the same time, is there a variation in employee loyalty within commercial and service enterprises located in Hanoi? To tackle this problem, the research team utilized a Two-way ANOVA analysis.

Bảng 8. Levene’s Test of Equality of Error Variances^{a,b}

		Levene Statistic	df1	df2	Sig.
Employee loyalty	Based on Mean	3.152	14	223	0.000
	Based on Median	2.306	14	223	0.006
	Based on Median and with adjusted df	2.306	14	176.876	0.006
	Based on trimmed mean	3.172	14	223	0.000

Source: Output generated by SPSS 26 software

The Levene’s Test of Equality of Error Variances evaluates the equality of error variances across various groups. A Sig. value in the ‘Based on Mean’ row that is less than 0.05 suggests that the error variances among the groups are not equal, indicating

that the test does not have adequate justification to evaluate mean differences.

The result labeled “Based on Mean” in the Two-way ANOVA analysis (Table 8) presents a significance value of 0.000, which is below the

threshold of 0.05. This suggests that the error variances among the value groups are unequal. Consequently, using this dataset, there is an inadequate foundation to evaluate mean differences in employee loyalty across various age groups with differing job positions.

5. Analysis and implications for management

In the context of commercial and service enterprises in Hanoi, an analysis of employee loyalty reveals a clear relationship and influence between employee loyalty and age, as determined by Levene's Test and the Welch Test. The outcomes of these tests indicate that:

Employees aged 50 and older demonstrate a markedly greater level of loyalty compared to their counterparts under 30, and they possess the highest mean loyalty ratings across all age demographics. This observation is consistent with earlier studies conducted by Ng and Feldman (2010), Kooij et al. (2012), Strenitzerová and Achimský (2019), and AbdulQader Alsaari et al. (2020). This conclusion is also straightforward to understand. Older employees generally possess extensive work experience, have established strong relationships with their colleagues, and enjoy a solid reputation among peers and business leaders, both within their organizations and specifically within the commercial and service sectors in Hanoi. Furthermore, they often prioritize job security and peace of mind, which fosters a greater tendency to remain with their employers for the long term. As they approach retirement age, they may also exhibit a reluctance to change jobs due to concerns regarding financial security and stability in retirement. For employees aged 50 and above, the importance of stability is particularly pronounced. Conversely, younger employees under 30 frequently pursue swift career progression and are more willing to change jobs in search of new opportunities and challenges. Furthermore, individuals under the age of 30 are generally at the onset of their professional journeys. They frequently do not have well-established connections or strong affiliations with the organization, which increases their propensity to seek new employment for personal advancement, fresh challenges, or opportunities to gain additional knowledge and skills. For many, this phase is regarded as a foundational period in their career

progression. Consequently, employees under 30 often demonstrate the least degree of loyalty. This observation is not only evident among workers in commercial and service sectors in Hanoi but also aligns with findings from earlier research.

Employees between the ages of 30 and 40 exhibit a higher level of loyalty, significantly more than those younger than 30, and constitute the second-largest demographic in terms of average loyalty, surpassed only by the group aged 50 and older. This phenomenon can be attributed to the fact that individuals in this age bracket are often in the midst of their professional development. At this point in their careers, many have attained a certain degree of success, resulting in a feeling of "satisfaction" or a wish to "settle down", which frequently aligns with a growing preference for job security. Additionally, they generally possess a more defined awareness of both the opportunities and challenges present in their positions and are more likely to pursue a stable work environment. Nevertheless, they may still be receptive to career advancement and willing to switch employers if it facilitates their professional growth. This blend of an increasing desire for stability coupled with ongoing aspirations for advancement elucidates why their loyalty is typically robust, yet not as pronounced as that of employees aged 50 and older.

For employees aged between 40 and 50, the results of both Levene's test and Welch's test are found to be statistically insignificant. Nevertheless, their loyalty mean is lower compared to employees aged 30 to under 40 and those aged 50 and above, while still being higher than that of the group under 30. This outcome among employees in commercial and service sectors in Hanoi may be linked to various factors, including career ambition, work-related stress, or the experience of a 'mid-career crisis.' Individuals within this age bracket frequently feel compelled to exert more effort, encounter pressure to secure their job positions, or may sense an insufficient return for their contributions to the organization. Consequently, they might experience demotivation or perceive that they have reached a career plateau, prompting them to explore new growth opportunities in different settings.

Even though the Levene and Welch tests did not indicate a statistically significant difference in

employee loyalty among job position groups within commercial and service enterprises in Hanoi, the descriptive statistics suggest that middle managers possess the highest loyalty mean. This phenomenon may be linked to the distinctive nature of their roles within the organization. Middle managers frequently uphold long-term commitments, directly supervise departmental or team operations, and consistently engage with both subordinates and senior leadership. Their duties have a considerable influence on the overall performance of the business, and they are often regarded as a reservoir of talent for prospective senior leadership roles. Consequently, they are likely to experience a sense of career advancement potential, acknowledgment, professional stability, and satisfaction in their positions. These elements contribute to a profound sense of organizational belonging and attachment, which subsequently enhances their loyalty to the enterprise.

The results suggest that the age of employees plays a crucial role in their loyalty, as older employees generally exhibit greater loyalty. This aligns with previous studies that indicate older employees are more inclined to stay with a company due to reasons such as benefits, a feeling of stability, and a sense of professional duty. Commercial and service organizations ought to focus on preserving and improving their compensation and benefits strategies, work environment, and corporate culture to ensure employee retention, particularly in companies experiencing high turnover rates.

Individuals occupying managerial or highly specialized positions generally demonstrate greater loyalty than those in lower-tier roles. This observation highlights that employees in critical roles, who bear more significant responsibilities, often view their contributions as having a substantial effect on the organization's advancement, thereby nurturing a deeper sense of commitment and loyalty. Consequently, organizations ought to prioritize the provision of career development opportunities for younger staff and create transparent promotion pathways to ensure their effective retention.

Examining employee loyalty across different age groups uncovers changing views on work, workplace dynamics, and personal requirements over time. Consequently, it is vital for organizations in human resource management to assess the distinct needs of their workforce. Commercial and service-oriented businesses ought to formulate HR strategies that are customized to the attributes of each employee demographic. For younger staff members, organizations should offer career advancement opportunities and training initiatives to promote long-term retention. Conversely, for older employees, it is essential to establish a stable work environment accompanied by long-term benefits to maintain their loyalty. Simultaneously, companies must also focus on implementing suitable compensation policies for employees in entry-level roles, ensuring they have pathways for advancement and professional development.

Conclusion

Employee loyalty serves as a crucial factor in determining the long-term success of an organization. An analysis of the correlation between age, job position, and employee loyalty within commercial and service sectors in Hanoi reveals that both age and job position have a significant impact on loyalty levels. Employees who are older and those occupying leadership positions typically demonstrate greater loyalty, whereas younger employees and those in lower-tier roles tend to show lower levels of loyalty. In light of these findings, organizations can develop specific strategies aimed at retaining employees and cultivating a stable, long-term work environment.

To maintain and enhance employee loyalty, organizations must implement flexible and effective human resource management strategies that promote a stable work environment, facilitate career development, and reinforce employees' commitment to the organization. By adopting suitable strategies such as providing advancement opportunities for younger employees and enhancing benefits for older employees - businesses can elevate loyalty levels and nurture a sustainable workplace.

REFERENCE

- AbdulQader Alsaari, Fadilah Puteh & Abdul Jalil Mohamed Ali (2020). Could Demographic Variables Impacting the Relationship Between HRM Practices and Employee Loyalty? A Meta-Anlaysia Review. *Human Resource Research*. ISSN 1948-5441.2020, Vol. 4, No. 1.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, 19, 533-546. doi:10.2307/2391809
- Geevarghese, Nirmalraj, R. J. T., Seeram, H., Veena, S., & James, B. (2018). Effect of Age on Employees' Loyalty: a Study among the Executives' of a Large Scale Public Sector Manufacturing Industry across India. *International Journal of Engineering & Technology*, 7(3.1), 9-12. <https://doi.org/10.14419/ijet.v7i3.1.16785>
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26(3), 463-488. <https://doi.org/10.1177/014920630002600305>
- Harrison, K. (2013). Why employee recognition is so important. *Cutting Edge PR*. Harting, D. (2010). *Employees your most valuable asset*. Retrieved January, 3.
- Ineson, E. M., Benke, E., & László, J. (2013). Employee loyalty in Hungarian hotels. *International Journal of Hospitality Management*, 32, pp.31-39. <https://doi.org/10.1016/j.ijhm.2012.04.001>
- Kooij, D. T., Guest, D. E., Clinton, M., Knight, T., Jansen, P. G., & Dijkers, J. S. (2012). How the impact of HR practices on employee well-being and performance changes with age. *Human Resource Management Journal*, 23(1), 18-35. <https://doi.org/10.1111/1748-8583.12000>
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-194. <https://doi.org/10.1037/0033-2909.108.2.171>
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247. [https://doi.org/10.1016/0001-8791\(79\)90072-1](https://doi.org/10.1016/0001-8791(79)90072-1)
- Mowday, R., Porter, L. and Steers, R. (1982). *Employee-Organization Linkages: The Psychology of Commitment, Absenteeism, and Turnover*. Academic Press, New York.
- Ng, T. W. H., & Feldman, D. C. (2010). The relationships of age with job attitudes: A meta-analysis. *Personnel Psychology*, 63(3), 677-718. <https://doi.org/10.1111/j.1744-6570.2010.01184.x>
- Review of Fianance online. (2024). *The Impact of the Work Environment on the Loyalty of Generation Z Employees*. <https://tapchitaichinh.vn/tac-dong-cua-moi-truong-lam-viec-den-long-trung-thanh-cua-nhan-vien-the-he-z.html?>
- Saks, Alan M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*. Vol. 21(7):600-619. Doi:10.1108/02683940610690169
- Strenitzerová, M., & Achimský, K. (2019). Employee Satisfaction and Loyalty as a Part of Sustainable Human Resource Management in Postal Sector. *Sustainability*, 11(17), 4591. <https://doi.org/10.3390/su11174591>
- WorkProud Study (2024). *Employee Loyalty: Less than a quarter of staff plan to stay with employer long-term*. <https://www.fairplaytalks.com/2024/05/13/employee-loyalty-declines-with-age-confirms-study/>

IMPACT OF OPENNESS TO EXPERIENCE ON THE CAREER ADAPTABILITY OF WORKERS

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Abstract: Based on Savickas's Career Construction Theory (2005), this study examines the impact of openness to experience on the career adaptability of young workers in Vietnam. Data were collected from 201 valid survey responses from workers aged 18 to 35, and multiple linear regression analysis was employed to examine the relationship between five dimensions of openness to experience, namely intellectual efficiency, ingenuity, curiosity, tolerance, and depth and career adaptability. The results indicate that all aspects of openness to experience have positive and statistically significant impacts on career adaptability, with intellectual efficiency showing the strongest influence. This study not only provides empirical evidence of the role of openness to experience in enhancing career adaptability, but also offers policy recommendations aimed at developing a young workforce capable of adapting to the rapidly changing labor market.

Keywords: Career adaptability, openness to experience, career construction theory

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1. Introduction

In the context of globalization and the Fourth Industrial Revolution, the Vietnamese labor market is undergoing profound structural transformations. According to the Ministry of Labor, Invalids, and Social Affairs (2023), approximately 30% of jobs in manufacturing and service sectors may be replaced by automation and robotics by 2030. The World Bank (2022) also forecasts that nearly 50% of Vietnam's labor force will face the need to shift careers or upgrade their skills to remain competitive. This necessitates a strong emphasis on career adaptability and soft skills, particularly in service and IT sectors.

In this context, Career adaptability (CA) is identified as a core competency determining

individual success and sustainable career development. According to Career Construction Theory (Career Construction Theory-CCT) (Savickas, 2005), CA reflects not only one's ability to handle current career challenges but also one's proactiveness in adapting to a changing work environment. Openness to Experience (OTE) is identified as a personal trait that significantly influences how individuals adjust to career changes. OTE reflects the tendency to explore, accept, and learn from new experiences, thereby promoting adaptability. While some studies have explored the impact of personality traits on career outcomes, there is a lack of in-depth research in Vietnam assessing the relationship between OTE and CA,

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especially in the context of a rapidly evolving labor market. Therefore, this study aims to examine the impact of OTE on CA among young Vietnamese workers, providing scientific evidence and practical implications to enhance career adaptability.

2. Theoretical framework and research hypotheses

Career adaptability

The theoretical foundation for CA was first introduced by Donald Super. Donald Super was one of the leading theorists in career development and introduced the concept of career adaptability as early as the 1980s. In their research, Super and Knasel (1981) conceptualized career adaptability as an individual's preparedness and capability to manage both present and future vocational challenges, including unforeseen alterations in the work setting. Super highlighted that a career should not be perceived as a series of static positions but as an ongoing developmental journey, where individuals must possess the ability to adjust and adapt in order to sustain a harmonious relationship between themselves and their professional surroundings. According to Super, career adaptability constitutes a vital aspect of career development competence, empowering individuals to proactively modify their objectives, behaviors, and attitudes to fulfill job demands and react to fluctuations in the labor market. He further claimed that adaptability is a multifaceted construct, incorporating dimensions such as career awareness, problem-solving abilities, and behavioral flexibility within the workplace (Super & Knasel, 1981).

Subsequently, Mark Savickas further developed the concept of career adaptability, recognizing it as a fundamental element of Career Construction Theory from the late 1990s to the early 2000s. Savickas characterized career adaptability as a psychosocial construct that includes the readiness and psychological resources essential for individuals to effectively manage career development tasks, vocational transitions, and personal career-related crises (Savickas, 1997; 2002; 2005). He highlighted in 2005 that career adaptability encompasses not only the capacity to respond to change but also embodies a proactive stance in shaping and reshaping one's career through adaptive and creative actions. Savickas elaborated on the concept of career adaptability by identifying four key dimensions: Concern - the preparation for one's

vocational future, illustrated through career vision and planning; Control - the exercise of autonomy and determination in steering and taking charge of one's career; Curiosity - the drive to investigate new career possibilities and diverse work environments; and Confidence - the assurance in one's capability to address problems and surmount challenges in one's career. According to Savickas, career adaptability is a vital psychological resource that enables individuals to adjust their behaviors and perceptions in order to stay aligned with a constantly evolving work environment, thereby supporting sustainable career development. In this study, the authors adopt Savickas's (2005) definition of career adaptability to examine the influence of each dimension of the Openness to Experience personality trait on career adaptability.

Career adaptability is influenced by a range of factors, including personality traits, individual competencies, and social as well as demographic influences. A key element is proactive personality; individuals possessing this trait tend to actively create opportunities, address challenges, and embrace change, which in turn improves their CA (Dahalan et al., 2024; Fang et al., 2024). Individuals of this nature typically possess a distinct focus on their career goals and show behavioral flexibility in adapting to new environments (Chan & Kuan Thye, 2021). Self-esteem also affects CA, although possessing a high level of self-esteem is not invariably advantageous. Some studies indicate that those with high self-esteem may exhibit rigidity and reduced flexibility in response to career transitions (Dahalan et al., 2024). Therefore, it is essential to maintain a balance between self-esteem and the flexibility of self-perception to effectively improve career adaptability.

In addition, Emotional Intelligence (EI) has a positive effect on career adaptability, as it enables individuals to recognize, regulate, and manage both their own emotions and those of others, while maintaining motivation and persistence throughout their career development journey (Coetzee & Harry, 2014; Le et al., 2019). Individuals with high EI typically handle stress and occupational pressure more effectively, thereby enhancing their CA. Moreover, demographic factors and future orientation—such as age, gender, and education level—also positively influence the overall development of

CA (Zacher, 2014). In particular, future orientation, or the ability to think about and plan for the future, is a strong driver of CA development. Finally, flexibility-the ability to adjust one's perceptions and actions in response to new situations-is regarded as a fundamental aspect of CA, enabling individuals to more effectively adjust to changes in their professional environment and career. (Zacher, 2014).

While numerous studies have investigated the influence of elements like proactive personality, emotional intelligence, and demographic traits on career adaptability, comprehensive research regarding the significance of Openness to Experience in enhancing career adaptability is still scarce, particularly in relation to the Vietnamese labor market.

Openness to experience (OTE)

Openness to Experience was defined by McCrae and Costa (1997) as "the breadth, depth, and permeability of consciousness, along with a constant need to expand and explore new experiences". Individuals with a high level of OTE often display artistic tendencies, are attracted to novelty, possess rich imagination, and exhibit high levels of intellectual curiosity (Connelly et al., 2013). To establish a unified theoretical framework for OTE, Woo et al. (2013) proposed a six-component model consisting of: Intellectual Efficiency, Ingenuity, Curiosity, Aesthetics, Tolerance, and Depth. In this study, the Aesthetics component was excluded from the analytical model, as it primarily reflects artistic appreciation and has only an indirect connection to career adaptability. This research focuses on analyzing the impact of the remaining five components of OTE as outlined by McCrae and Costa (1997) on career adaptability:

- (1) Intellectual Efficiency - the ability to process information quickly, logically, and accurately;
- (2) Ingenuity - a tendency to seek out and develop new ideas, along with creative problem-solving capabilities;
- (3) Curiosity - the motivation to explore and acquire new knowledge;
- (4) Tolerance - the capacity to accept and respect diversity in culture, perspectives, and lifestyles;
- (5) Depth - the ability to think deeply and comprehend complex aspects of life.

According to recent studies, Openness to Experience is strongly associated with ingenuity,

intellectual curiosity, and lifelong learning ability (Garcia & Lopez, 2023). It also has a positive impact on career optimism and career adaptability (Zhao et al., 2023; Wang et al., 2023), contributing to improved job performance and career satisfaction. OTE has been shown to be a key factor that promotes effort and persistence in job searching, particularly among young workers (Kim & Park, 2022), and it supports individuals in adapting to multicultural environments (Lee & Johnson, 2022). Additionally, research by Nguyen et al. (2024) highlights OTE as a critical factor in enhancing career optimism and adaptability among refugees, empowering them to proactively seek career development opportunities. Recent studies have validated the beneficial connection between Openness to Experience and numerous career outcomes; however, the direct effect of OTE on career adaptability remains insufficiently investigated. This gap in research highlights the pressing necessity to achieve a more profound comprehension of how openness to experience affects career adaptability, which is essential for fostering a young workforce that can adjust to the contemporary work landscape.

Theoretical framework and research hypotheses

Career Construction Theory (CCT), developed by Mark Savickas in the 1990s, aims to explain how individuals proactively construct their careers within a constantly changing social and occupational context (Savickas, 2005, 2013). Unlike traditional theories that focus on objective elements such as skills or opportunities, Career Construction Theory emphasizes the role of personal narratives, individual personality traits, and the meaning each person attributes to their career. According to this theory, a career is viewed as a personal story, in which each person is both the author, the actor, and the director of their own career journey-reflecting the dynamic interaction between the individual and their environment. Personality plays a central role, shaping how individuals perceive and respond to career challenges, and influencing their development and adaptability throughout the career process.

Moreover, Career Construction Theory asserts that CA is a crucial psychosocial resource that enables individuals to adjust their behaviors, thoughts, and emotions in response to occupational tasks, transitions, or crises. Thanks to this flexibility, CCT provides

a strong theoretical foundation for studying the relationship between personality traits-including OTE and career adaptability. Individuals exhibiting a high degree of OTE typically demonstrate flexible thinking, receptiveness to new concepts, and a readiness to explore diverse career options. These traits empower them to proactively modify their behaviors and cognitive approaches in response to shifts in their careers-especially within the framework of an ever-evolving labor market. Conversely, individuals with lower levels of OTE are generally more conservative, less inclined to embrace change, and frequently find it challenging to manage career-related upheavals. This viewpoint closely corresponds with Savickas's Career Construction Theory, which highlights that career adaptability is shaped not only by the nature of the job itself but also by the manner in which individuals adjust to align with the transforming professional environment. Recent studies also show that proactive personality has a strong correlation with career adaptability. Individuals with proactive traits tend to actively seek opportunities, overcome obstacles, and adjust their behaviors to meet new career demands (Jiang et al., 2024; Bateman & Crant, 1993). Proactivity not only has a direct effect on career adaptability but also influences it indirectly through mediating mechanisms such as strengths use and job crafting (Chen et al., 2021). Furthermore, a supportive and coaching-oriented work environment can reduce reliance on proactive personality, highlighting the role of contextual factors in shaping this relationship.

Additionally, meta-analyses on the big five personality traits indicate that openness to experience, conscientiousness, and extraversion are positively associated with career adaptability (Li et al., 2015; Rudolph et al., 2017). In contrast, emotional instability (neuroticism) shows a negative relationship with adaptability due to its adverse impact on psychological stability (Zacher, 2014). Mediating mechanisms such as positive self-evaluation and learning goal orientation have been identified as key pathways linking personality traits and career adaptability (Li et al., 2015; Wang et al., 2023). Notably, openness to experience fosters a learning goal orientation, which in turn enhances career adaptability (Wang et al., 2023).

In summary, personality traits, particularly the degree of OTE, play a central role in shaping and developing career adaptability. Based on the theoretical foundation and recent empirical studies, this research proposes a set of hypotheses focusing on five key dimensions of openness to experience:

Hypothesis 1: Intellectual Efficiency has a positive impact on career adaptability.

Hypothesis 2: Ingenuity (Creativity) has a positive impact on career adaptability.

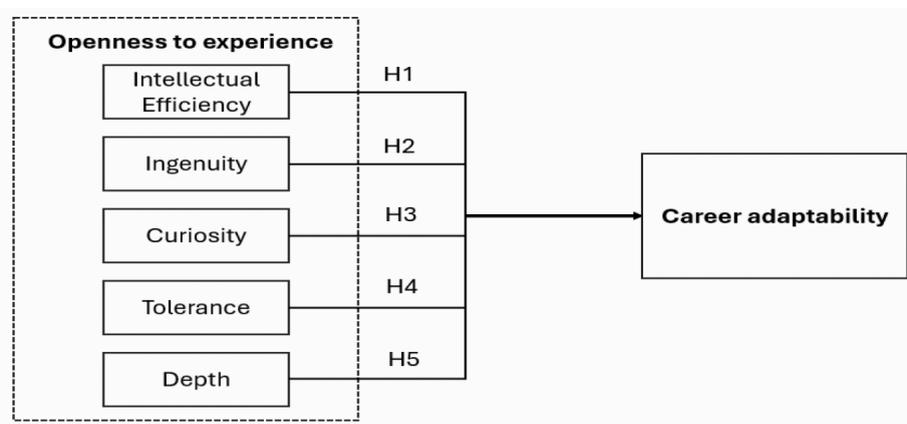
Hypothesis 3: Curiosity has a positive impact on career adaptability.

Hypothesis 4: Tolerance has a positive impact on career adaptability.

Hypothesis 5: Depth has a positive impact on career adaptability.

Based on the above theoretical framework and research hypotheses, the proposed research model is illustrated in the following diagram:

Figure 1. Proposed research model



Source: Authors' research

3. Research methodology

Data collection method

In this study, the authors applied a controlled convenience random sampling method. Specifically, the survey was distributed through a combination of online forms (Google Forms) and in-person distribution at various companies, while applying demographic filters to ensure a minimum level of representativeness. The sample selection criteria were as follows:

Age: Workers aged 18 to 35, corresponding to the “young labor force” as defined by the International Labour Organization (ILO).

Occupation: Workers employed in sectors undergoing rapid changes in skills and technology such as services, manufacturing, information technology, human resources, and business.

Employment type: Only individuals with formal labor contracts or at least six months of work experience were included.

The official survey period lasted from March 15 to April 5, 2025. A total of 255 surveys were collected, of which 201 were deemed valid after eliminating incomplete or inconsistent responses, accounting for a valid response rate of 78.82%.

Data analysis and processing method

After collecting primary data from the survey, the authors compiled, reviewed, and discarded invalid responses. To address missing data, the study applied the method of mean substitution for each measurement variable, ensuring the integrity and consistency of the dataset was preserved. Upon completion of the cleaning process, the data were coded to prepare for subsequent analyses.

Descriptive statistics were conducted to analyze the demographic characteristics of the sample,

including gender, age, education level, and work experience. The reliability of the measurement scales was assessed using Cronbach’s Alpha to evaluate the internal consistency of indicators under the constructs “Openness to Experience” and “Career Adaptability”.

To examine the impact of the components of “Openness to Experience” on “Career Adaptability”, the study employed a multiple linear regression model. The dependent variable was “Career Adaptability”, and the independent variables consisted of the five dimensions of “Openness to Experience”, namely: Intellectual Efficiency, Ingenuity, Curiosity, Tolerance, and Depth.

The regression model was established as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Where:

Y: Career Adaptability

X₁: Intellectual Efficiency

X₂: Ingenuity (Creativity)

X₃: Curiosity

X₄: Tolerance

X₅: Depth

β₀: Intercept (constant)

β₁–β₅: Regression coefficients for the independent variables

ε: Random error term

The data analysis was conducted using SPSS version 26.0. The analysis results provide empirical evidence on the degree of influence and statistical significance of each aspect of Openness to Experience on Career Adaptability, thereby clarifying the role of personality traits in supporting individuals to adapt to an evolving occupational environment.

4. Research results

Descriptive statistics results

Table 1. Descriptive statistics of the research sample

Criteria	Category	Frequency	Percentage (%)
Gender	Male	78	38.81
	Female	123	61.19
Age	18 - 25	45	22.39
	26 - 30	98	48.76
	31 - 35	58	28.86
Education level	High school	42	20.9
	Undergraduate	141	70.15
	Postgraduate	18	8.96
Work experience	0 - 3 years	56	27.86
	3 - 5 years	73	36.32
	5 - 10 years	72	35.82

Source: Authors’ research

Cronbach's Alpha Analysis Results

Table 2. Cronbach's alpha analysis results

Scale	Cronbach's Alpha Coefficient
Intellectual Efficiency	0.842
Ingenuity	0.789
Curiosity	0.756
Tolerance	0.718
Depth	0.823
Openness to Experience (overall)	0.891
Career Adaptability	0.876

Source: Authors' research

The Cronbach's Alpha analysis results indicate that all scales achieved an acceptable level of reliability, based on the standard set by Nunnally and Bernstein (1994), which requires Cronbach's Alpha ≥ 0.7 . For the "Openness to Experience" construct,

the overall scale achieved a high reliability coefficient of $\alpha = 0.891$. Among its components, "Intellectual Efficiency" ($\alpha = 0.842$) and "Depth" ($\alpha = 0.823$) demonstrated the highest reliability. "Ingenuity" ($\alpha = 0.789$) and "Curiosity" ($\alpha = 0.756$) also showed acceptable levels of consistency. Although "Tolerance" had the lowest Cronbach's Alpha ($\alpha = 0.718$), it still surpassed the threshold, ensuring internal consistency. The "Career Adaptability" scale yielded a Cronbach's Alpha of 0.876, indicating strong reliability and high internal consistency among the observed variables.

Overall, the reliability analysis results confirm that all measurement scales meet the required standards for internal consistency, providing a solid foundation for subsequent data analysis.

Results of multiple linear regression analysis

Table 3. Results of multiple linear regression analysis

Independent Variable	Unstandardized Coefficient	Standardized Coefficient	t-value	Significance Level
Constant	1.015	-	3.925	***
Intellectual Efficiency	0.415	0.355	5.623	***
Ingenuity	0.372	0.298	4.112	***
Curiosity	0.340	0.267	3.945	***
Tolerance	0.197	0.152	2.312	*
Depth	0.288	0.224	3.012	**

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Source: Authors' research

The overall analysis of the multiple linear regression model shows that the correlation coefficient R reached 0.742, indicating a strong relationship between the components of Openness to Experience and Career Adaptability. The coefficient of determination R^2 was 0.551, meaning that the model explains 55.1% of the variance in the dependent variable. The F-test yielded an F-statistic of 47.932 with a significance level (Sig. F) of 0.000, confirming that the overall model is statistically significant and that at least one independent variable has a meaningful impact on the dependent variable. In addition, the Durbin-Watson statistic was 1.987, falling within the acceptable range (1.5-2.5), indicating that there is no autocorrelation in the residuals and that the model's reliability is assured.

The multiple regression results show that all five components of Openness to Experience have positive and statistically significant impacts on Career Adaptability. Intellectual Efficiency showed the strongest effect ($\beta = 0.355$, $p < 0.001$), indicating that workers who can quickly and accurately process information tend to adapt better in their careers. This finding emphasizes the importance of analytical thinking and information processing in the modern workplace. Ingenuity ($\beta = 0.298$, $p < 0.001$) and Curiosity ($\beta = 0.267$, $p < 0.001$) also had clear effects, suggesting that individuals who are creative and eager to explore new knowledge tend to adapt more effectively to career changes. This reinforces the role of innovative thinking and intellectual exploration in fostering adaptability. Depth ($\beta = 0.224$,

$p < 0.01$) had a significant positive effect, underscoring the importance of deep understanding and critical thinking in managing complex career challenges.

Tolerance ($\beta = 0.152, p < 0.05$), though with a smaller coefficient, still had a statistically significant impact, indicating that being open to diversity and new experiences also contributes to improving career adaptability.

In summary, the regression findings validate that every element of Openness to OTC contributes positively to the improvement of Career Adaptability. This offers substantial empirical support for the formulation of policies and training initiatives designed to promote soft skills, creative thinking, and a learning-focused attitude among employees, especially in the setting of a swiftly changing labor market.

T-test and ANOVA difference testing results

To determine the influence of personal characteristics on career adaptability, the study conducted an Independent Samples T-test for the gender variable and a One-way ANOVA for age, education level, and work experience.

Table 4. Results of demographic variable impact testing

Variable	Statistic	p-value
Gender	$t = -1.578$	0.116
Age	$F = 2.234$	0.110
Education level	$F = 5.221$	**
Work experience	$F = 5.592$	**

Note: ** $p < 0.01$

Source: Authors' research

The results of the tests in Table 4 indicate the following:

Gender ($p = 0.116$) and age ($p = 0.110$) do not show statistically significant differences in relation to career adaptability. In contrast, education level ($F = 5.221, p < 0.01$) and work experience ($F = 5.592, p < 0.01$) have a statistically significant effect on career adaptability.

To further identify the specific differences in education level and work experience groups, the study conducted Post-hoc Tukey HSD tests. The results are presented in Table 5 below.

Table 5. Post-hoc test results for education level and work experience variables

Variable	Group (I)	Group (J)	Mean difference	p-value
Education level	High school	Undergraduate	-0.262	0.041*
	High school	Postgraduate	-0.533	0.063
	Undergraduate	Postgraduate	-0.271	0.223
Work experience	0-3 years	3-5 years	-0.240	0.053
	0-3 years	5-10 years	-0.430*	0.000**
	3-5 years	5-10 years	-0.190	0.129

Note: * $p < 0.05$; ** $p < 0.01$

Source: Authors' research

For education level, a statistically significant difference was observed between the high school and university groups (mean difference = -0.262, $p = 0.041$), indicating that workers with a university degree have significantly higher career adaptability compared to those with only a high school education. The differences between the high school - postgraduate and university - postgraduate groups were not statistically significant.

For work experience, a significant difference was found between the 0-3 years and 5-10 years groups (mean difference = -0.430, $p = 0.000$), showing that

workers with more experience demonstrate better career adaptability. Other comparisons, such as 0-3 years vs. 3-5 years and 3-5 years vs. 5-10 years, did not reach statistical significance.

Overall, the analysis results indicate that having a university-level education and 5 to 10 years of work experience are two factors that positively and significantly influence career adaptability. In contrast, workers with only a high school education or limited experience tend to face greater challenges in adapting to a rapidly changing work environment.

5. Research discussion and policy recommendations

Research discussion

The research results validate that Openness to Experience positively and significantly affects the career adaptability of young employees in Vietnam. In particular, the aspects of Intellectual Efficiency, Ingenuity, Curiosity, Depth, and Tolerance all exhibit a substantial impact on career adaptability, with Intellectual Efficiency exerting the most pronounced effect. These results align with previous studies (McCrae & Costa, 1997; Woo et al., 2013; Zhao et al., 2023), suggesting that individuals with higher levels of openness tend to be more proactive in exploring, learning, and adapting within dynamic work environments.

The findings also reinforce Career Construction Theory (CCT) by Savickas (2005), which emphasizes the central role of personality in shaping and developing career adaptability. As the theory posits, adaptability is not merely about reacting to change, but about proactively adjusting one's behavior and mindset to align with new circumstances. In this study, Openness to Experience is considered a key psychosocial resource that enables individuals to maintain alignment with a continuously evolving work environment—particularly relevant in Vietnam's labor market, which is experiencing rapid transformation due to technological advancement and globalization.

In contrast to the research conducted by Newman et al. (2021), which investigated the effects of Openness to Experience on the career adaptability of refugees, the present study broadens the focus to include young workers in Vietnam, while also elucidating the significance of each distinct dimension of openness. Furthermore, these results offer supplementary evidence that reinforces the findings of Wang et al. (2023), by affirming that Openness to Experience has both an indirect and a direct impact on career adaptability.

Notably, the research results reveal the specific impact of each component of Openness to Experience on career adaptability. Intellectual Efficiency ($\beta = 0.355$) had the strongest influence, confirming the importance of logical thinking and the ability to quickly and accurately process information in responding to career changes.

Zhao et al. (2023) also found that individuals who learn quickly and process information flexibly are more capable of making adaptive career decisions. Ingenuity ($\beta = 0.298$) and Curiosity ($\beta = 0.267$) also demonstrated clear effects, reflecting the role of innovative thinking, intellectual exploration, and continuous learning in strengthening career adaptability. This finding aligns with the study by Nguyen et al. (2024), which focused on workers undergoing career transitions and highlighted how curiosity and creativity not only help individuals adapt to new job demands but also motivate them to continuously reinvent themselves professionally. Depth ($\beta = 0.224$) reflects deep thinking and the ability to understand complex issues, helping individuals develop appropriate adaptation strategies. This result is consistent with Zhao et al. (2023), who showed that individuals with high levels of openness—especially in the cognitive engagement dimension—tend to make more effective and adaptive career decisions. Tolerance ($\beta = 0.152$), while having a smaller effect, was still statistically significant. It represents an open attitude and a willingness to embrace differences. This finding mirrors that of Kim & Park (2022), who studied job-seeking behaviors among Korean youth and found that openness to experience helped them confidently explore new industries and unfamiliar work environments.

In summary, the study not only adds to the body of evidence on the relationship between Openness to Experience and career adaptability in the Vietnamese context but also clarifies how each specific dimension of openness contributes to adaptability in a rapidly evolving labor market.

Policy recommendations

Based on the research results, several policy recommendations can be proposed to leverage the role of Openness to Experience in enhancing career adaptability among workers.

For enterprises, it is essential to create a work environment that fosters creativity and ongoing learning. Employers should provide opportunities for employees to develop their information-processing abilities, creativity, and curiosity by involving them in new projects, encouraging idea experimentation, and providing training programs for skills development. Specifically, training programs should be designed to

integrate analytical thinking, critical reasoning, and information processing in within practical scenarios, nurturing adaptability as a core competency in the workplace. Furthermore, companies should cultivate an inclusive organizational culture that values diversity and promotes open dialogue. This helps foster employees' tolerance and depth of understanding, which are critical aspects of adaptability. Implementing job rotation policies and promoting diverse career paths are also effective strategies for helping employees build resilience and adaptability across different professional contexts. Enterprises are also encouraged to collaborate with educational institutions in the joint development of internship programs and career orientation initiatives. These collaborations enable students to develop personality traits that align with actual workplace demands from an early stage.

For individual workers, it is essential to actively cultivate creative thinking, curiosity, and flexibility in both learning and working to enhance adaptability. Maintaining an open mindset, a willingness to embrace change, and developing critical thinking along with deep reflection will assist employees in becoming more proactive in addressing the fluctuations of the contemporary labor market. Workers should also engage in self-assessment and development of personal traits related to openness, such as independent learning, effective information

processing, and behavioral adaptability when confronted with change.

For policy-makers and educational institutions, it is necessary to integrate the development of Openness to Experience into training curricula, particularly in vocational education institutions, to equip young workers with the skills and competencies required for a rapidly changing work environment. Collaborative programs between businesses and educational institutions, such as internships, experiential learning projects, and extracurricular activities, should be promoted to foster openness and career adaptability among learners. Additionally, establishing criteria for assessing and developing Openness to Experience during vocational training-through psychological assessment tools or three-way feedback models (involving learners, employers, and educators)-could serve as an effective approach to embed psychological traits into the national human resource development strategy.

While this study contributes practical insights for career guidance and workforce development, it still has limitations. Specifically, the quantitative method with a relatively small sample size focused on young urban workers, which limits the generalizability of the results. Therefore, future research should consider expanding both the sample scope and methodological approaches to further validate and enrich these findings.

REFERENCES

- Chan, S. & Kuan Thye, C. (2021). The indirect effects of self-esteem and future work self on career adaptability factors: A study of Chinese undergraduate students. *Journal of Employment Counseling*, 58(1), 50-73.
- Coetzee, M. & Harry, N. (2014). Emotional intelligence as a predictor of employees' career adaptability. *Journal of Vocational Behavior*, 84(1), 90-97.
- Connelly, B. S., Ones, D. S. & Chernyshenko, O. S. (2013). Introducing the special section on openness to experience: Review of openness taxonomies, measurement, and nomological net. *Journal of Personality Assessment*, 96(1), 1-16.
- Dahalan, N., Zakaria, R., Hussein, N., Mohamed, S., Wahab, A. & Fauzi, M. (2024). The influence of proactive personality, social support and self-esteem towards career adaptability among full-time postgraduate business faculty students. *Information Management and Business Review*, 16(31), 527-535.
- Fang, M., Pan, R., Ding, R., Hou, Z. & Wang, D. (2024). Effect of proactive personality on career adaptability of higher vocational college students: The mediating role of college experience. *Frontiers in Psychology*, 15.
- Garcia, M. A. & Lopez, C. E. (2023). Openness to experience and lifelong learning: A systematic review. *Personality and Individual Differences*, 201, 111855.
- Kim, S. & Park, J. (2022). Openness to experience and job search behaviors: The mediating role of career exploration. *Journal of Career Development*, 49(6), 1092-1107.
- Lee, J. & Johnson, B. (2022). Openness to experience and cross-cultural adjustment. *International Journal of Cross Cultural Management*, 22(1), 79-97.
- Li, H., Sun, L., Song, S. & Jin, H. (2015). How proactive personality impacts career adaptability? The mediating role of strengths use and job crafting. *Psychological Reports*, 118(3), 739-755.

- McCrae, R. R. & Costa, P. T. (1997). Conceptions and correlates of openness to experience. In R. Hogan, J. A. Johnson & S. R. Briggs (Eds.), *Handbook of personality psychology* (pp. 825-847). Academic Press.
- Ministry of Labor, Invalids and Social Affairs. (2023). *Vietnam labor market annual report 2023*. Hanoi: Labor and Social Affairs Publishing House.
- Newman, A., Dunwoodie, K., Jiang, Z., & Nielsen, I. (2021). Openness to Experience and the Career Adaptability of Refugees: How Do Career Optimism and Family Social Support Matter? *Journal of Career Assessment*, 30(1), 10690727211041532. <https://doi.org/10.1177/10690727211041532>
- Nguyen, T., Le, P. T. T., Do, H. T. & Tran, V. D. (2024). Openness to experience and career adaptability among refugees: The mediating role of career optimism. *Journal of Career Assessment*, 32(1), 1-20.
- Rudolph, C. W., Lavigne, K. N. & Zacher, H. (2017). A meta-analysis of the Big Five personality traits, career adaptability, and career outcomes. *Journal of Vocational Behavior*, 98, 17-34.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The Career Development Quarterly*, 45(3), 247-259.
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42-70). Wiley.
- Savickas, M. L. (2013). Career construction theory and practice. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 144-180). Wiley.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16(3), 282-298.
- Super, D. E. & Knasel, E. G. (1981). Career development in adulthood: Some theoretical problems and a possible solution. *British Journal of Guidance and Counselling*, 9(2), 194-201.
- Wang, L., Liu, H., Li, Q., Sun, S. & Zhang, Z. (2023). Openness to experience and career adaptability: The mediating role of learning goal orientation. *Journal of Vocational Behavior*, 142, 103826.
- Woo, S. E., Chernyshenko, O. S., Longley, A., Zhang, Z. X., Chiu, C. Y. & Stark, S. (2013). Openness to experience: Its lower-level structure, measurement, and cross-cultural equivalence. *Journal of Personality Assessment*, 96(1), 29-45.
- World Bank. (2022). *Vietnam's Future Jobs Report: Automation and Labor Market Transformation*. Washington, D.C.: The World Bank.
- Zacher, H. (2014). Individual difference predictors of change in career adaptability over time. *Journal of Vocational Behavior*, 84(1), 29-37.
- Zhao, C., Chen, S., Wang, Y., Li, X. & Zhang, X. (2023). Openness to experience, career optimism and adaptability: A moderated mediation model. *Journal of Vocational Behavior*, 140, 103782.

THE IMPACT OF DIGITAL TRANSFORMATION ON GREEN JOBS IN VIETNAM DURING THE PERIOD 2020-2022

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Abstract: In light of the growing trends of globalization and climate change, green jobs have surfaced as a significant strategy for fostering sustainable and eco-friendly development. In Vietnam, this issue is gaining increasing attention, particularly as digital transformation is accelerating across all sectors of the economy. This study analyzes the relationship between digital transformation and green jobs, thereby assessing the role of digital transformation in fostering green job creation aligned with sustainable development goals. Using the classification framework of green jobs provided by the O*NET, the study collects data from the Labor Force Survey (LFS), the Digital Transformation Index (DTI), and provincial statistical yearbooks for the period 2020-2022. The Generalized Least Squares (GLS) method is applied to examine the impact of digital transformation on green jobs. The findings indicate that digital transformation has a statistically significant and positive effect on the expansion of green jobs in Vietnam. In light of these findings, the research suggests multiple policy recommendations aimed at promoting green employment and supporting the wider goals of sustainable development.

Keywords: Digital transformation, green jobs, O*NET, sustainable development.

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1. Introduction

In an era shaped by rapid technological advancements and the digitalization of nearly all aspects of life, the concept of digital transformation has emerged as a compelling imperative for nations seeking to sustain their relevance and competitiveness (Fitzgerald et al., 2014; Owoseni, 2023). Consequently, in recent years, digital transformation has garnered significant attention from both policymakers and scholars due to its profound impacts on the economy and society at large (Huang, 2024). Specifically, digital transformation presents new opportunities for economic actors across all sectors in terms of organizational structure, productivity, and

skills development (Phung, 2019). However, alongside its undeniable benefits, the relationship between digital transformation and jobs remains a contentious issue (Huang, 2024). On one hand, proponents of the substitution effect argue that the adoption of automated and intelligent production models poses a threat to job stability (Goaied & Sassi, 2019; Ballestar et al., 2021), particularly for low-skilled workers who are more susceptible to technological replacement (Akerman et al., 2015). As digital applications become increasingly widespread, a growing number of jobs are at risk of disappearing (Goaied & Sassi, 2019). On the other hand, advocates of the creative effect of digital transformation contend that it enables businesses

to scale up and expand their operational reach, thereby stimulating labor demand (Pantea et al., 2017; Lu et al., 2023). Furthermore, technological advancements have led to the creation of numerous new job positions, contributing positively to overall employment levels (Aubert-Tarby et al., 2018).

Although the relationship between digital transformation and jobs has been extensively studied, the specific connection between digital transformation and green jobs has rarely been addressed in the existing literature (Zheng & Zhang, 2023). This gap is particularly noteworthy given that the impact of digital transformation on green jobs holds significant implications for the labor market and for the development of skills essential to a sustainable future (Thake, 2025). In the context of Vietnam, both digital transformation and green jobs are identified as key priorities in the National Action Plan for Green Growth for the period 2021-2030. Nonetheless, previous domestic studies have tended to focus on green transition and green employment rather than on the nexus between digital transformation and green jobs, as seen in the works of Thuy (2023) and Thach & Thanh (2024). In order to fill this research gap - specifically (1) the persistent discussion regarding the connection between digital transformation and employment, and (2) the insufficient research on the influence of digital transformation on green jobs - this study intends to investigate and elucidate the effects of digital transformation on green jobs throughout all 63 provinces and cities in Vietnam from 2020 to 2022. Furthermore, the study aims to offer policy recommendations to enhance green jobs, thus aiding in the achievement of the National Green Growth Strategy for the period 2021 to 2030, with a long-term vision extending to 2050. This paper is structured as follows: following the Introduction, Section 2 reviews the theoretical framework on the impact of digital transformation on green job creation. Section 3 outlines the research methodology, while Section 4 presents and discusses the empirical findings. Finally, Section 5 concludes the study and offers several recommendations and policy implications.

2. Theoretical framework

2.1. Theoretical foundation

According to the Resource-Based Theory proposed by Barney (1995), an organization's sustainable competitive advantage is not solely determined by market conditions but primarily relies on the ownership and effective utilization of resources that satisfy four key criteria: value, rarity, inimitability, and organizational alignment. In this framework, a firm's resources encompass both tangible and intangible assets (Barney & Arkan, 2005). In the context of digital transformation and advancements in information technology, intangible assets include digital software, data systems, digital infrastructure, and, notably, a highly skilled technological workforce which is regarded as critical strategic resources. Tangible assets refer to machinery and equipment that form part of the digital infrastructure and operational systems of production lines (Dung et al., 2024). In order to maximize the benefits of these technological resources, organizations need to establish suitable organizational structures and hire individuals who are skilled in operating, managing, and perpetually innovating technological systems. As a result, this theory provides an indirect explanation for the rise and growth of new job categories in areas such as technology, data, and innovation. Thus, from the perspective of Barney's Resource-Based Theory (1995), job creation is not merely a byproduct of technological progress but a strategic outcome of resource optimization aimed at achieving sustainable competitive advantage in the process of digital transformation. Accordingly, this study adopts the Resource-Based Theory as the foundational theoretical framework to construct an empirical model assessing the impact of digital transformation on green jobs.

2.2. The definition of green jobs

In tandem with the transition toward a green economy, green jobs have garnered growing attention as a strategy to address environmental challenges, with efforts underway to scale up and expand its development (Al-Amarrat & Mashaqaba, 2022). Most studies define green jobs from two fundamental perspectives: job output and job tasks (Hoa et al., 2024).

From the output-based perspective, green jobs are understood as those aligned with environmental objectives and policies (Bowen & Hancké, 2019), or in other words, jobs concentrated in industries that benefit the environment (Bowen et al., 2018; Granata & Posada, 2022). More specifically, Moreno-Mondejar et al. (2021) assert that green jobs are directly linked to technologies, information, or materials that contribute to restoring and maintaining environmental quality.

From the task-based perspective, the World Bank (WB, 2023) defines green job based on environmentally friendly tasks - referred to as “green tasks” - within an occupation. Additionally, drawing from the U.S O*NET occupational classification system, green jobs are categorized into three types: (1) Green Increased Demand (Green ID), (2) Green Enhanced Skills (Green ES), and (3) Green New and Emerging (Green NE) (Bowen et al., 2018). Based on the greenness of job tasks, green job includes all tasks associated with economic activities that do not harm the environment, such as reducing fossil fuel use, minimizing pollution and greenhouse gas emissions, and developing and utilizing renewable energy sources (Martin & Monahan, 2022).

Furthermore, the International Labor Organization (ILO, 2016) defines green jobs as decent jobs that contribute to preserving or restoring the environment, whether in traditional sectors such as manufacturing and construction or in emerging sectors such as renewable energy and energy efficiency.

In the context of Vietnam, the output-based and ILO-based approaches present certain limitations. The output-based approach may misclassify green jobs by including all occupations with green outputs, regardless of whether the job tasks themselves are green. Meanwhile, the ILO (2016) definition is often only applicable to selected sectors and may not fully capture the range of green jobs that meet the decent work criteria outlined by the ILO.

To address these limitations, this study adopts the O*NET task-based approach, which defines green jobs as those comprising tasks related to economic activities aimed at reducing fossil fuel

consumption, lowering CO₂ emissions, improving energy efficiency, and promoting the development and use of renewable energy (Martin & Monahan, 2022). This approach not only allows for the quantification of green jobs but also offers a broad definition that captures the full range of jobs affected by the green transformation of the economy (Anna et al., 2021). This approach has also been employed in recent research on green jobs in Vietnam by Hue et al. (2024).

2.3. The impact of digital transformation on green jobs

Digital transformation offers new prospects for economic development across all dimensions (Guyot Phung, 2019). In Vietnam, digital transformation is defined as a comprehensive and fundamental shift in how individuals and organizations live, work, and produce, driven by digital technologies (Ministry of Information and Communications, 2023). Within this context, green jobs have emerged as a particularly compelling topic, given that it is embedded in sectors anticipated to grow significantly under the momentum of digital transformation in the coming decades (Phung, 2019). However, there remains a noticeable gap in the literature, both domestically and internationally, regarding the specific impact of digital transformation on green jobs. Existing studies have primarily focused on the broader relationship between digital transformation and jobs. For example, Binswanger (2019) suggests that digital transformation may result in job displacement in certain countries, whereas Huang (2024) argues that it contributes to the creation of new jobs and enhances job stability. In parallel, when examining green jobs, scholars often explore the correlation between the green transition and green jobs. Notably, Esposito et al. (2017) found that the green transition generates a significant number of new green jobs with better income levels, although it may simultaneously increase job losses in environmentally harmful industries. These findings are consistent with the results of Taran-Baciu Georgescu et al. (2024), who studied the relationship between the green transition and green jobs in Romania. Recognizing the need to

address the research gap concerning the impact of digital transformation on green jobs, this study aims to investigate how digital transformation affects green jobs in Vietnam. The ultimate objective is to propose evidence-based recommendations and policy implications to promote green jobs and support the broader agenda of sustainable growth.

3. Research methodology

3.1. Identifying green jobs

As previously discussed in Section 2, this study adopts the definition of green jobs proposed by O*NET. Accordingly, any job affected by the greening of the economy is considered a green job and categorized into three groups based on differences in tasks, skills, and required knowledge throughout the green transition. These categories include Green New and Emerging (Green NE), Green Enhanced Skills (Green ES), and Green Increased Demand (Green ID). Since the O*NET green occupational classification system was issued in 2010 and is based on labor market characteristics specific to the United States, applying it to labor data from other countries requires constructing a crosswalk between the occupational classification systems of the two countries. It is also necessary to acknowledge the assumption that occupations considered green in the U.S. context are also green in the country under study. In the context of Vietnam, this study constructs an indirect mapping process to match the O*NET green occupations to the Vietnamese Standard Classification of Occupations (VSCO), due to the absence of a direct conversion between O*NET SOC 2010 and VSCO. The detailed steps are as follows:

(1) Conversion of Occupational Classifications from O*NET to VSCO

•Step 1: Convert between O*NET releases (from ONET SOC 2010 to O*NET SOC 2019)

•Step 2: Convert from O*NET SOC 2019 to US SOC 2018

•Step 3: Convert from US SOC 2018 to ISCO-08

•Step 4: Convert from ISCO-08 to VSCO 2020

•Step 5: Convert between VSCO versions (from VSCO 2020 to VSCO 2008)

(2) Identifying Green Job Codes in Vietnam

After compiling the complete crosswalk from O*NET to VSCO, the study identifies green job codes in Vietnam based on the O*NET's green job list. The result is a comprehensive mapping between O*NET SOC 2010, VSCO 2020, and VSCO 2008.

In this classification, the terms "Green NE" and "Green ES" are regarded as direct green jobs due to their involvement in explicitly green tasks as outlined by O*NET. Conversely, jobs categorized as "Green ID" are deemed indirect green jobs, as the heightened demand stems from green economic activities and technologies, yet does not necessarily entail a substantial alteration in job responsibilities. In the process of identifying green job codes in Vietnam, this study employs the maximum greenness approach, wherein a single VSCO code corresponds to multiple O*NET green job codes. This methodology has been utilized by Bowen & Hancké (2019) to assess green job shares across EU nations, by de la Vega et al. (2024) in Argentina, and by Hue et al. (2024) in Vietnam.

3.2. Data processing method

To analyze the impact of digital transformation on the share of green jobs in Vietnam, this study employs regression analysis methods on a balanced panel dataset consisting of 189 observations across 63 provinces and cities in Vietnam over the period from 2020 to 2022.

Regarding data collection, based on the green job codes identified in Section 3.1, the study evaluates the impact of economic growth on the potential for generating green jobs in Vietnam using three main data sources: (1) The Labor Force Survey (LFS), (2) The Digital Transformation Index (DTI) compiled by the Ministry of Information and Communications, (3) The Statistical Yearbooks of 63 provinces and cities, published by the General Statistics Office (GSO) for the years 2020-2022. Detailed measurements of variables are presented in Table 1.

Table 1. Summary of variable's measurements

No.	Variable		Measurement	Source
1	Digital transformation		Provincial-level Digital Transformation Index (DTI)	Ministry of Information and Communications
2	Green job		(Number of green jobs / Total jobs in the province)* 100	Calculated from the LFS using the green job code mapping for Vietnam
3	Trade openness		FDI inflows/GRDP at constant 2010 prices	Provincial Statistical Yearbooks
4	Urbanization rate		Share of average population living in urban areas by province	Provincial Statistical Yearbooks
5	Training Rate		Share of employed labor force aged 15+ with formal training	Provincial Statistical Yearbooks
6	Gender Ratio	Male	Number of male workers/Total workers in the province	Calculated from LFS
7		Female	Number of female workers/Total workers in the province	Calculated from LFS
8	Age Group	Age Group 15-24	Workers aged 15-24/Total workers in the province	Calculated from LFS
9		Age Group 25-34	Workers aged 25-34/Total workers in the province	Calculated from LFS
10		Age Group 35-44	Workers aged 35-44/Total workers in the province	Calculated from LFS
11		Age Group 45-54	Workers aged 45-54/Total workers in the province	Calculated from LFS
12		Age Group 55-64	Workers aged 55-64/Total workers in the province	Calculated from LFS
13		Age Group 65+	Workers aged 65+/Total workers in the province	Calculated from LFS

Source: Author's compilation.

The author builds a linear regression model (1) as follows:

$$GJS_{jt} = \beta_0 + \beta_1 * DTI_{jt} + \beta_2 X_{jt} + u_{jt} \quad (1)$$

Where:

GJS_{jt} : Share of green jobs in province j at year t

DTI_{jt} : Digital Transformation Index in province j at year t

X_{jt} : Vector of control variables including: trade openness, urbanization rate, training rate, gender ratio, and age group composition

u_{jt} : Unobserved variables

According to Gujarati (2012), the Pooled Ordinary Least Squares (Pooled OLS) model with constant coefficients does not account for the dual nature of panel data, as it assumes that coefficients remain unchanged over time and across cross-sectional units. As a result, OLS is often subject to

issues such as multicollinearity, autocorrelation, and heteroskedasticity, which can reduce the accuracy of statistical inferences within the model (Gujarati, 2011). To overcome these limitations, many researchers adopt alternative models such as the Fixed Effects Model (FEM) and the Random Effects Model (REM) (Gujarati, 2012).

In this study, the F-test, as proposed by Gujarati (1999), is employed to assess the appropriateness of the Pooled OLS versus FEM. Simultaneously, the Hausman test (Hausman, 1978) is used to determine the optimal choice between FEM and REM. The results in Table 2 indicate that the F-test yields a p-value of 0.0000 (<0.05), confirming that the Fixed Effects Model is more suitable than the Pooled OLS. Meanwhile, the Hausman test produces a Chi-squared statistic of 17.43 with a p-value of 0.06539 (>0.05),

suggesting that there is no statistically significant correlation between the unobserved effect and the explanatory variables. Hence, the Random Effects Model (REM) is deemed more appropriate.

Following the Hausman test, the study continues by testing for the presence of autocorrelation and heteroskedasticity using the Wooldridge test and the LM - Breusch and Pagan Lagrangian Multiplier test, as suggested by Wooldridge (1991) and Breusch &

Pagan (1980), respectively.

The Wooldridge test results ($\text{Prob} > F = 0.0000 < 0.05$) indicate the presence of first-order autocorrelation, while the LM - Breusch and Pagan test ($\text{Prob} > \chi^2 = 0.0000 < 0.05$) confirms the existence of heteroskedasticity. To address these issues and enhance the model's efficiency, the study applies the Generalized Least Squares (GLS) estimation method. Detailed results are presented in Table 4.

Table 2. Model specification test results

F Test			
F (61,111)		= 4.83	
Pro>F		= 0.0000	
Hausman Test			
Chi2 (10)		= (b-B)'[(V_b-V_B)^(-1)](b-B)	
		= 17.43	
Prob>chi2		= 0.0653	
Wooldridge Test and LM – Breusch and pagan Lagrangian Multiplier Test			
Wooldridge Test		LM - Breusch and pagan Lagrangian Multiplier Test	
F(1.59) = 21.285	Prob>F= 0.0000	chibar2(01) = 52.17	Prob>chibar2 = 0.0000

Source: Author's Calculations.

4. Result and discussion

4.1. The Status of green jobs in Vietnam during 2020-2022

In summary, the data presented in Table 3 indicates that from 2020 to 2022, the average proportion of green jobs in Vietnam is relatively low,

comprising merely 17.60% of the total employment. Nevertheless, it is noteworthy that throughout the research period, there was a consistent increase in the proportion of green jobs. In particular, between 2020 and 2022, the rate of green jobs rose by 3.66 percentage points, reflecting a growth rate of 23.77%.

Table 3. Average green job rate by year and over the period 2020-2022 (%)

	2020	2021	2022	Average (2020-2022)	Growth rate
Nationwide	15.4	18.35	19.06	17.60	23.77
Central Highlands	7.46	7.97	7.98	7.80	6.97
Northern Midlands and Mountainous areas	10.85	16.25	15.8	14.30	45.62
Mekong River Delta	15.42	17.11	18.56	17.03	20.36
North Central and Central Coastal region	15.8	19.27	19.81	18.29	25.38
Southeast region	18.3	21.08	22.3	20.56	21.86
Red river Delta	20.67	24.67	25.26	23.53	22.21

Source: Author's calculations based on the LFS during the period 2020-2022

By economic region in Vietnam, during the period 2020-2022, the average green job rate across regions

increased each year, and the ranking (from lowest to highest) remained consistent as follows: Central

Highlands; Northern Midlands and Mountainous Areas; Mekong River Delta; North Central and Central Coastal Region; Southeast; and Red River Delta. Accordingly, the Central Highlands recorded the lowest average green job rate (7.8%), while the Red River Delta reported the highest (23.53%). Although the Red River Delta consistently had the highest green job rate in the country throughout the three years, it only ranked third in terms of growth rate, with an increase of 22.21%. In contrast, the Northern Midlands and Mountainous Areas experienced the fastest growth in green jobs, reaching 45.62% over the same period. On the other hand, the Central Highlands not only had the lowest average green job rate, but also recorded the lowest growth rate nationwide, at only 6.97%.

4.2. The impact of digital transformation on green jobs in Vietnam

Table 4 shows a positive relationship between digital transformation and the green job rate. Specifically, a 1% increase in digital transformation leads to a 10.61% increase in green jobs. This can be explained as follows:

Firstly, the process of digital transformation generates new employment opportunities, including green jobs. According to the primary directives outlined in the environmental agenda

programs pertaining to the labor market, it is clear that the economic landscape resulting from digital transformation in the future will modify the employment framework, set fundamental guidelines for environmental governance, and guarantee both economic and environmental security (Danskaya, 2023). According to a World Bank's report (2021), the number of new jobs created in Vietnam due to digital transformation is projected to be seven times higher than the number of jobs displaced. By 2045, approximately 10 million new jobs are expected to be created, mostly in modern service sectors and to a lesser extent in eco-friendly manufacturing industries.

Secondly, digital transformation contributes to greening the production process, thereby generating additional green jobs. In production, digitalizing the entire lifecycle of input factors related to products, production data, and processes aids in bolstering firms' product development and operations operational activities. This enables enterprises to track resources in real time, optimize resource allocation, implement lean manufacturing practices, conserve energy, reduce emissions, minimize resource waste, enhance production efficiency, identify surplus resources, and secure the availability of essential inputs for green technological innovation (Xue et al., 2022).

Table 4. Estimated impact of digital transformation on green jobs

Variable		Symbol	Green Job
Digital transformation		DTI	10.61***
Trade Openess		LnOPEN	11.96***
Urbanization Rate		URBAN	0.0393*
Training Rate		HUMAN	0.257***
Gender (<i>The proportion of female workers is used as the reference group</i>)		SEX	0.732***
Age group (<i>The proportion of age group 15-24 is used as the reference group</i>)	Proportion of workers aged 25-34	AGE2	-0,0417
	Proportion of workers aged 35-44	AGE3	0.446***
	Proportion of workers aged 45-54	AGE4	0.391***
	Proportion of workers aged 55-64	AGE5	0.338**
	Proportion of workers aged 65+	AGE6	0.282***
-cons			-60.21***
Pro>chi2			0.0000
Observations			189
Statistical significance level: * p < 0.1, ** p < 0.05, *** p < 0.01			

Source: Author's calculations

In addition, to further analyze the green job rate in Vietnam, the study examines the variation in green jobs based on different characteristics of each province and city, including trade openness, urbanization rate, training rate, gender ratio, and age group distribution.

Regarding trade openness, at the 1% statistical significance level, there is a positive relationship between trade openness and the green job rate. Specifically, a 1% increase in trade openness leads to a 0.1196% increase in the proportion of workers engaged in green jobs. This may be attributed to the positive correlation between trade openness and economic growth (Hien & Suong, 2022), and the fact that economic development tends to generate more job opportunities, including green jobs (Kaspos, 2005).

As for the urbanization rate, at the 10% significance level, a 1% increase in urbanization results in a 0.0393% increase in the green job rate. The rise in urbanization can affect green jobs in two major ways. Firstly, as urban areas expand due to internal migration, the potential labor force increases significantly. This is due to the fact that urban regions typically possess more vibrant economies, thereby providing greater opportunities for green employment compared to rural regions. Furthermore, when urbanization coincides with industrialization and modernization where rural areas progressively evolve and advance, the demand for green jobs increases as well. This phenomenon arises from the needs of sustainable economic growth, which require industries to adjust and become more eco-friendly. Regarding the training rate, Table 4 indicates that a 1% rise in the percentage of trained laborers results in a 0.257% increase in the green job rate. Green jobs necessitate a greater level and intensity of human capital in comparison to non-green jobs (Consoli et al., 2016). Therefore, improving the quality of human resources and raising the training rate among individuals aged 15 and older yields dual advantages. Firstly, workers gain vital skills and enhance their technical and professional qualifications. Secondly, this paves the way for them to access the growing green job market, thus aiding in the expansion of green job

opportunities.

In terms of characteristics individual, including gender and age, the study reveals that there is a statistically significant positive influence on the expansion of green jobs in Vietnam. Specifically, at the 1% significance level, gender demonstrates a positive effect, where a 1% rise in the male labor force leads to a 0.732% increase in the rate of green jobs. Among the various age groups, those aged 35-44 contribute the most to the growth of green jobs, whereas the 65+ age group shows the least effect.

5. Conclusion and policy implications

This study utilizes the concept of green jobs from the U.S. O*NET and converts green job codes from O*NET to VSCO system of Vietnam, thereby enabling a concrete estimation of the number of green jobs in Vietnam. In addition, the research reveals that digital transformation contributes to promoting green job creation. Moreover, the green job rate is also influenced by factors such as trade openness, urbanization rate, training rate, gender, and age groups. These findings provide both theoretical and practical implications.

From a theoretical perspective, the study develops and analyzes a model to examine the impact of digital transformation on green jobs. Thus, it is expected to serve as a foundation for future studies to further develop the concept and measurement methods of green jobs, as well as the influence of digital transformation on green jobs. The ultimate aim is to design sustainable development strategies that focus not only on economic growth but also on environmental protection and social sustainability.

From a practical perspective, Vietnam is currently implementing its National green growth strategy, associated with a sustainable development model. Green jobs are a strategic direction within this objective. Therefore, research on the concept and measurement of green job in Vietnam is both urgent and essential. The government should standardize the definition and establish a set of green job indicators appropriate for the country's socio-economic context. This can be achieved by issuing an official conceptual framework for green job that reflects Vietnam's reality, drawing from international experiences, and integrating a green

job indicator system into the national statistical framework. At the same time, it is necessary to raise public awareness about green jobs in order to widely promote it, for example, by enhancing media campaigns about the benefits and roles of green jobs or incorporating green job-related content into vocational training curricula.

Furthermore, green job indicators should be included in the annual monitoring frameworks of each industry, region, and at the national level to assess progress and align green jobs with the economic growth strategy. Since the study has demonstrated that digital transformation promotes green job creation, the government should develop a detailed National Digital Transformation Plan aligned with the socio-economic development strategy for each phase. Each province should also formulate its own action plan tailored to its development conditions. In the context of ongoing

provincial mergers, each locality should design a digital transformation and green job development plan that suits the new characteristics and potential of the merged administrative unit. Additionally, the process of restructuring provincial-level administrative units presents an opportunity to reorganize the labor force, prioritize retraining and occupational transition toward greener jobs, and review and identify industries with green growth potential. Besides, to guarantee that the digital transformation process advances seamlessly, it is essential to enhance public understanding of digital technologies and their everyday applications. In order for digital transformation to yield effective results, ministries, sectors, and localities ought to establish specific metrics to oversee the digital transformation process and carry out regular, annual statistics by year and by implementation phase to facilitate timely and effective modifications.

REFERENCES

- Al-Ammarat, F. M., & Al-Mashaqaba, K. M. (2022). The Impact of Green Jobs on the Environment. *International Journal of Intellectual Human Resource Management (IJIHRM)*, 3(02), 20-26.
- Aubert-Tarby, C., Escobar, O. R., & Rayna, T. (2018). The impact of technological change on employment: The case of press digitisation. *Technological Forecasting and Social Change*, 128, 36-45.
- Ballestar, M. T., Camina, E., Díaz-Chao, Á., & Torrent-Sellens, J. (2021). Productivity and employment effects of digital complementarities. *Journal of Innovation & Knowledge*, 6(3), 177-190.
- Barney, J. (1995). Looking inside for competitive advantage. *Academy of Management Executive*, 9(4), 49-61.
- Binswanger, M. (2019). Digital transformation and employment: Where will new jobs be created. In *e-Proceedings of 2nd Connect-Us Conference (CuC 2019)* (pp. 45-48).
- Bowen, A. & Hancké, B. (2019). *The social dimensions of 'greening the economy': Developing a taxonomy of labour market effects related to the shift toward environmentally sustainable economic activities*, Publications Office of the European Union, Luxembourg.

- Bowen, A., Kuralbayeva, K., & Tipoe, E. L. (2018). Characterising green employment: The impacts of 'greening' on workforce composition. *Energy Economics*, 72, 263-275. <https://doi.org/10.1016/j.eneco.2018.03.015>.
- Breusch, T. S., & Pagan, A. R. (1980). The Lagrange multiplier test and its applications to model specification in econometrics. *The Review of Economic Studies*, 47(1), 239-253.
- Consoli, D., Marin, G., Marzucchi, A., & Vona, F. (2016). Do green jobs differ from non-green jobs in terms of skills and human capital? *Research Policy*, 45(5), 1046-1060.
- Danskaya, A. V. (2023). Digital transformation of the labor market in an environmentally oriented perspective. In E. G. Popkova (Ed.), *Smart green innovations in industry 4.0* (pp. 1-15). Springer Climate. https://doi.org/10.1007/978-3-031-45830-9_37
- De la Vega, P., Porto, N., & Cerimelo, M. (2024). Going green: estimating the potential of green jobs in Argentina. *Journal for Labour Market Research*, 58(1), 1.
- Dung, N. T. P., Tam, N. T. T., Ha, N. L. H., & Triet, N. M. (2024). The impact of digital transformation on operational efficiency of manufacturing enterprises in Can Tho. *Journal of Economics and Development*, 97-106.
- Espósito, M., Haider, A., Samaan, D., & Semmler, W. (2017). Enhancing job creation through green transformation. *Green Industrial Policy*, 151, 2013.
- Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2014). Embracing digital technology: A new strategic imperative. *MIT Sloan Management Review*, 55(2), 1.
- Granata, J., & Posadas, J. (2022). Which jobs are green? A methodological note on how to measure green jobs for skills policy and an application to Indonesia. *World Bank*, Jakarta, Indonesia.
- Gujarati, D. (2012). *Econometrics by example*. Macmillan, New York.
- Gujarati, D. N. (2011). *Econometrics by example* (Vol. 1). Macmillan, New York.
- Gujarati, D. N., & Porter, D. C. (1999). *Essentials of econometrics* (Vol. 2). SAGE Publications, Singapore.
- Guyot Phung, C. (2019). Implications of the circular economy and digital transition on skills and green jobs in the plastics industry. *Field Actions Science Reports. The Journal of Field Actions*, (Special Issue 19), 100-107.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*, 46(6), 1251-1271.
- Hien, N. D., & Suong, P. T. N. (2022). The impact of trade openness and human capital on economic growth in Vietnam. *Journal of Economic Studies*.
- Hoa, N. Q., Toan, P. N., Bich, N. T. N., & My, N. T. (2024). Factors influencing workers' access to green jobs in Vietnam. *Journal of Economics and Development*, 326(2), 79-88.
- Huang, Y. (2024). Digital transformation of enterprises: Job creation or job destruction?. *Technological Forecasting and Social Change*, 208, 123733.
- Hue, H. T., Anh, N. H., Trang, N. C. H., Nam, N. H., Hang, N. K., & Thao, N. T. (2024). Economic growth promotes the potential for green job creation in Vietnam. *Journal of Economics and Development*, (329), 43-52.
- ILO. (2016). What is a green job? *International Labour Organization*. Retrieved from https://www.ilo.org/global/topics/green-jobs/news/WCMS_220248/lang-en/index.htm.
- Kapsos, S. (2005). The employment intensity of growth: Trends and macroeconomic determinants. *Employment Strategy Papers No. 12*. Geneva: Employment Trends Unit, International Labour Office.
- Lu, J., Xiao, Q., & Wang, T. (2023). Does the digital economy generate a gender dividend for female employment? Evidence from China. *Telecommunications Policy*, 47(6), 102545.
- Martin, J., & Monahan, E. (2022). Developing a method for measuring time spent on green tasks. *Office for National Statistics (ONS)*. Retrieved from <https://www.ons.gov.uk/economy/environmentalaccounts/articles/developingamethodformeasuringtimespentongreentasks/march2022>.
- Ministry of Information and Communications. (2023). What is digital transformation? *Ministry of Information and Communications Electronic Information Portal*. Retrieved from <https://dx.mic.gov.vn/docs/chuyen-doi-so-la-gi/>
- Moreno-Mondejar, L., Triguero, Á. & Cuerva, M.C. (2021). Exploring the association between circular economy strategies and green jobs in European companies. *Journal of Environmental Management*, 297(3), 113437. DOI: 10.1016/j.jenvman.2021.113437.
- O*NET. (n.d.). Green occupations. ONET Resource Center*. Retrieved from https://www.onetcenter.org/dictionary/22.0/excel/green_occupations.html.
- Owoseni, A. (2023). What is digital transformation? Investigating the metaphorical meaning of digital transformation and why it matters. *Digital Transformation and Society*, 2(1), 78-96. doi: 10.1108/DTS-10-2022-0049.
- Pantea, S., Sabadash, A., & Biagi, F. (2017). Are ICT displacing workers in the short run? Evidence from seven European countries. *Information Economics and Policy*, 39, 36-44.

- Țaran-Baciu Georgescu, V., Nicula, E. A., Gligor, V., & Nicula, A. S. (2024). Green transformation: Trends and prospects of green jobs in Romania. *Studia Universitatis Babeş-Bolyai, Geographia*, 69(1).
- Thach, V. T., & Thanh, V. T. (2024). Green transition in Khanh Hoa: Challenges, opportunities, and solutions toward sustainable development. *Journal of Science*, 2024, 37-47.
- Thake, A. M. (2025). Transitioning to a green economy- the impact on the labor market and workforce skills. In *Greening Our Economy for a Sustainable Future* (pp. 163-175). Elsevier.
- Thuy, N. N. M. (2023). *Solutions to improve green transformational leadership style and green employee performance through green job engagement at Jiahsin Co., Ltd* (Master's thesis, University of Economics Ho Chi Minh City).
- Villani, D., González Vázquez, I., & Fernández-Macías, E. (2025). Green jobs: A critique of the occupational approach to measure the employment implications of the green transition. *JRC Working Papers Series on Labour, Education and Technology*, 2025/02. European Commission Joint Research Centre.
- WB (2023). Green jobs, upskilling and reskilling Vietnam's workforce for a greener economy. *World Bank Group*, Washington D.C.
- Wooldridge, J. M. (1991). On the application of robust, regression-based diagnostics to models of conditional means and conditional variances. *Journal of Econometrics*, 47(1), 5-46.
- Xue, L., Zhang, Q., Zhang, X., & Li, C. (2022). Can digital transformation promote green technology innovation?. *Sustainability*, 14(12), 7497.
- Yang, C., & Liu, Q. (2024). Driving green innovation through digital transformation: Empirical insights on regional variations. *Sustainability*, 16(23), 10716.
- Zheng, Y., & Zhang, Q. (2023). Digital transformation, corporate social responsibility and green technology innovation-based on empirical evidence of listed companies in China. *Journal of Cleaner Production*, 424, 138805.

DEVELOPING AND IMPLEMENTING A MODEL OF SOCIAL WORK AND PSYCHOLOGICAL COUNSELING IN GENERAL EDUCATIONAL INSTITUTIONS

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Abstract: Currently, secondary school students are encountering a variety of psychological and social difficulties, which heightens the urgency for a school-based psychological support and social work system. International studies highlight the integrated models that merge social work with psychological counseling within educational institutions. Nevertheless, in Vietnam, existing models seldom integrate both components, leading to a lack of a holistic support system for students. This paper examines the theoretical and practical foundations necessary for establishing a school-based social work and psychological counseling model. It subsequently proposes a model tailored to the Vietnamese educational environment and explores strategies for effective implementation. To ensure the efficient operation of this model, it is crucial to strengthen the legal framework, enhance the quality of the workforce, improve collaboration between schools and communities, secure financial and infrastructural support, and conduct regular evaluations and refinements of the model. The results contribute to the establishment of a comprehensive support system that promotes the sustainable intellectual and emotional development of students.

Keywords: Social work; school social work; social work and psychological counseling model; school psychology; psychological counseling.

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1. Introduction

In contemporary society, characterized by ongoing transformation and various challenges, students in general education institutions increasingly face psychological and social issues, including academic pressure, school violence, family conflicts, and other mental health concerns. Research conducted by the World Health Organization (WHO, 2021) indicates that around 10-20% of children and adolescents worldwide suffer from mental health problems;

however, most do not receive timely and effective assistance. This situation underscores the critical necessity to implement school-based psychological support and social work (SW) systems to aid students in overcoming challenges and fostering holistic development-intellectually, emotionally, and socially.

In Vietnam, despite some initiatives aimed at incorporating social work and psychological counseling activities into the general educational system, the models of implementation continue to

be disjointed, inconsistent, and have not yet achieved their maximum effectiveness. Numerous educational institutions still do not have adequately trained professionals or efficient coordination systems among schools, families, and communities to support students. Research conducted by Adelman & Taylor (2009) indicates that a holistic school-based support model not only tackles individual student challenges but also improves the learning atmosphere, fosters social unity, and diminishes negative behaviors within educational settings.

How can a successful school-based Social Work - Psychological Counseling (SW-PC) model be created and executed in a manner that is consistent with the general education framework in Vietnam and addresses the varied psychological support requirements of students in today's world? This article centers on three primary aspects: (1) Examining the theoretical and practical underpinnings for developing a school-based SW-PC model; (2) Suggesting a SW-PC model that is appropriate for contemporary general education institutions in Vietnam; (3) Exploring strategies to effectively implement this model in practice

2. Literature review and legal framework for establishing a social work and psychological counseling model in general education institution

2.1. Literature review

In the past few decades, school-based Social Work and Psychological Counseling (SW-PC) has become a significant field of research worldwide, particularly due to the increasing occurrence of mental health problems and social difficulties encountered by students. Numerous studies, both international and domestic, have suggested different models and strategies designed to improve the efficacy of these services in educational environments.

Dryfoos (1994) introduced the "full-service schools" model, which underscores the significance of cooperation among educational institutions, families, and communities to meet the multifaceted needs of students. In a similar vein, Adelman & Taylor (2009) emphasized the importance of comprehensive psychological support services within schools, contending that an integrated approach combining Social Work and Psychological Counseling (SW-PC) greatly enhances students' academic success and mental well-being.

The research conducted by Roeser et al. (2000) demonstrated a significant link between mental health and academic achievement, confirming that psychological counseling services not only tackle mental health challenges but also foster comprehensive academic growth. Dimmitt et al. (2007) underscored the success of evidence-based school counseling initiatives in diminishing adverse behaviors and improving school involvement. Furthermore, studies by Franklin et al. (2012) and Teasley (2018) pointed out the crucial role of school social work in assisting students in developing social competencies and managing stress.

In Vietnam, there has been a growing interest in research concerning school-based Social Work and Psychological Counseling. Nevertheless, the majority of studies have concentrated on each model in isolation, failing to create a robust integration between the two disciplines. This has resulted in a deficiency in the establishment of a holistic support system for students.

The research conducted by Phương (2009) and Mui (2009) concentrated on the necessity for psychological counseling among students and the creation of counseling rooms within high schools. Both studies highlight the importance of a structured counseling system; however, they remain confined to the realm of school psychology and do not incorporate elements of social work. In contrast, while school social work has been examined, it has not been effectively integrated with psychological counseling. Kham (2016) offered a comprehensive overview of international social work models and their relevance to Vietnam, emphasizing the need for models that resonate with the nation's cultural and social context. Additionally, Bac (2012) explored the obstacles faced in the implementation of psychological counseling and suggested measures such as improving professional training and investing in infrastructure to better support students.

The research conducted by Khoa and Tuong (2020) outlined the psychological support framework established at Tue Duc High School, highlighting the partnership between the institution and families. Although this framework incorporates a degree of coordination among various stakeholders, it remains deficient in the systematic integration of social work with psychological counseling.

Research on psychological counseling in schools within Vietnam predominantly examines the requirements and current status of service delivery in general education institutions. For example, a study conducted by Bac et al. (2022) evaluated the psychological counseling services available at high schools in Phu Vang District, Thua Thien Hue, revealing that although various counseling formats are utilized, their effectiveness is constrained by the inadequate professional skills of the counseling personnel. In a similar vein, the investigation by Thang and Van (2023) regarding the management of counseling activities for middle school students in Pleiku City, Gia Lai, highlighted the essential function of these services in aiding students. Nonetheless, it also noted that a lack of sufficient focus from school administration has impeded the success of the counseling initiatives (Thang & Van, 2023).

Consequently, although global research highlights the significance of a cohesive model that merges Social Work and Psychological Counseling, studies conducted in Vietnam have predominantly concentrated on each discipline separately, lacking a holistic strategy within the educational environment. This has led to the lack of a thorough support framework that concurrently promotes the psychological and social growth of students.

2.2. Legal structure for establishing a social work and psychological counseling framework within general education institutions

The SW-PC model within general education institutions is founded on several essential legal and policy frameworks:

The United Nations Convention on the Rights of the Child: Vietnam became the first nation in Asia and the second globally to ratify the United Nations Convention on the Rights of the Child in 1990. This Convention stipulates that all individuals under the age of 18 are entitled to fundamental rights that facilitate their optimal development. The Vietnamese government has utilized the Convention as a guiding framework for amending its laws, regulations, and national policies to promote and protect children's rights (United Nations, 1990).

The Law on Children (2016): This legislation acts as a vital legal framework for developing policies and programs focused on the holistic protection, care, and education of children. For the first time, it

clarifies essential concepts related to child protection, including various forms of abuse and exploitation, and delineates a three-tiered system of protective services: prevention, support, and intervention. The law sets forth procedures for aiding children who are victims or at risk of abuse, exploitation, abandonment, or other exceptional circumstances. Additionally, it addresses the safeguarding of children in cyberspace and those without sufficient family care. Importantly, the law requires the government to formulate guidelines for establishing a safe and supportive educational environment and for the prevention of school violence (National Assembly of Vietnam, 2016).

The Education Law (2019): This legislation delineates the rights and responsibilities of citizens in relation to education and categorically forbids any actions that infringe upon the dignity, honor, or physical integrity of educators, staffs, and students within educational establishments. It also prohibits behaviors that disturb public order or entail the use of addictive substances. Additionally, the law asserts that students are entitled to respect and to pursue their studies in a secure and healthy educational setting (National Assembly of Vietnam, 2019).

Decree No. 56/2017/NĐ-CP outlines the procedures for providing support and intervention in cases involving children who have experienced abuse, are at risk of violence or exploitation, or are in other exceptional situations. It also clarifies the responsibilities of child protection officers at the commune level, tasking them with the implementation of support and intervention processes under the guidance of the commune-level People's Committee (Government, 2017a). *Decree No. 80/2017/NĐ-CP* offers guidance to educational institutions on executing preventive measures against school violence, assisting at-risk students, and intervening when incidents of school violence arise (Government, 2017b). *Circular No. 31/2017/TT-BGDĐT* provides direction for the implementation of psychological counseling in general education schools. It highlights the importance of prevention, support, and intervention for students encountering psychological challenges in their learning and personal lives, as well as the development of life skills. The circular encompasses topics such as age-appropriate psychological counseling, adolescent

reproductive health, violence and abuse prevention skills, conflict resolution, career guidance, and more (Ministry of Education and Training, 2017).

Circular No. 33/2018/TT-BGDĐT guidelines the school - based social work: The Circular highlights initiatives designed to improve knowledge and skills, enabling learners to manage challenges, stress, and temporary psychological crises independently, while also fostering their personal growth and academic abilities. Its objective is to safeguard learners from dangers such as abuse, violence, and social issues, as well as to avert school dropout and legal infractions. Simultaneously, it aims to enhance the awareness and skills of parents or guardians in understanding, supporting, and accompanying learners. Additionally, it provides assistance to school administrators, teachers, and staff in educational institutions to enhance their knowledge and skills related to social work within schools, specifically by improving their ability to engage with community resources to collaborate with schools in advancing social work initiatives in the educational environment (Ministry of Education and Training, 2018).

Circular No. 20/2023/TT-BGDĐT (issued on October 30, 2023) offers directives regarding job roles and staffing standards in general education institutions and specialized public schools. It mandates that each school must designate one student counselor. In the absence of official staffing, this position may be filled via a labor contract or assigned to a teacher as an additional responsibility (Ministry of Education and Training, 2023). *Circular No. 01/2017/TT-BLĐT BXH* from the Ministry of

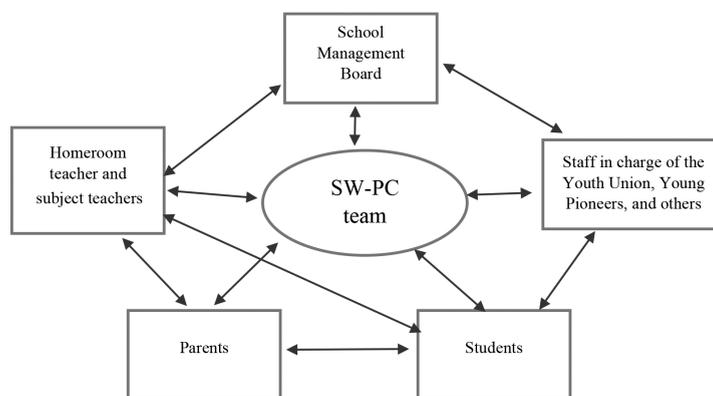
Labor, Invalids, and Social Affairs (dated February 2, 2017) delineates particular ethical standards and professional principles for social workers (Ministry of Labor, Invalids, and Social Affairs, 2017). *Circular No. 11/2024/TT-BGDĐT* details the classification codes, professional title standards, and salary grades for student counselors employed in public general education institutions and specialized schools (Ministry of Education and Training, 2024). *Decision No. 1311/QĐ-BGDĐT* (dated May 13, 2025) from the Ministry of Education and Training launches a professional development program that aligns with the standards for student counselor roles. This decision seeks to standardize and enhance counselor training, ensuring adherence to legal requirements, quality of training, responsibilities of instructors, and effectiveness of implementation. This marks a significant institutional advancement toward improving the professional capacity and efficacy of student counseling within the general public education system (Ministry of Education and Training, 2025).

2.3. Theoretical and practical foundations for the development of a social work and psychological counseling model within general education institutions

The Ministry of Education and Training has put forward a model for Social Work - Psychological Counseling that encompasses various stakeholders, such as School Management Board, staff, teachers, students, and parents (Ministry of Education and Training, 2023b).

This model is depicted in the figure below:

Figure 1. Diagram of the organizational structure for the social work and psychological counseling model within general education institutions



Source: Ministry of Education and Training, 2023b

The figure 1 depicts that the SW-PC model encompasses a thorough array of stakeholders: school leadership, staff, teachers, students, and parents. Each group possesses unique roles and responsibilities: School Management Board: Charged with directing, approving, guiding, and supporting the execution of SW-PC activities. School staff and teachers: These individuals serve as both the targets and implementers of the model. They receive assistance from the SW-PC team to tackle student-related issues and may also be assigned specific duties aligned with their job roles. Parents and Students: While they primarily benefit from the model's interventions, they also engage in addressing related issues under the supervision of the SW-PC team. The SW-PC Team: Functions as the central unit responsible for executing the model. The team must comprise at least one full-time specialist holding a bachelor's degree in a discipline related to social work or psychological counseling, equipping them to manage specialized tasks. The team is anticipated to collaborate with both internal and external stakeholders to effectively fulfill its obligations.

3. Research methodology

This article utilizes a theoretical research methodology to synthesize, analyze, and organize literature and studies pertaining to SW-PC in educational institutions. Through the examination of scientific publications, educational policies, legal documents, and both national and international

practical research, the paper elucidates the theoretical and practical foundations necessary for creating an integrated SW-PC model within the general education framework. The theoretical analysis aids in identifying current research gaps and offers recommendations for the successful development and execution of this model within the educational context of Vietnam.

4. Results and discussion

4.1. Formulating a model for social work and psychological counseling within general education institutions

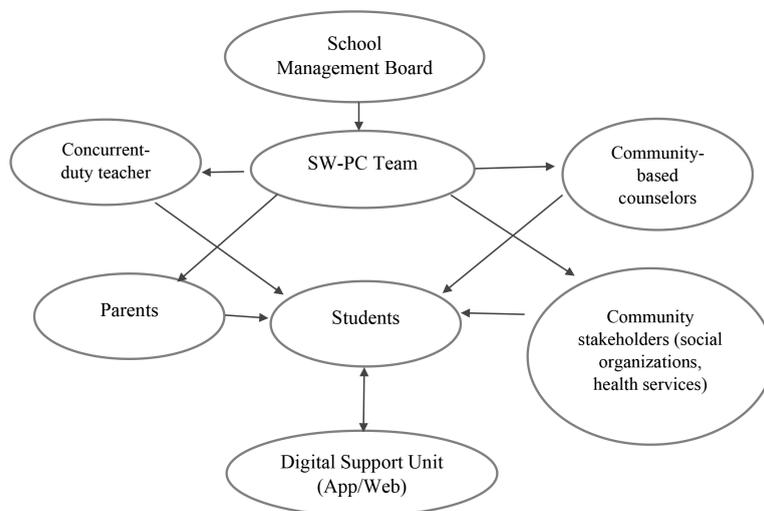
4.1.1. Roles of social work and psychological counseling in general education institutions

School-based Social Work and Psychological Counseling is responsible for preventing problems and adverse behaviors that could impact students; offering assistance and intervention when students encounter psychological, social, or academic difficulties; and directing students to external professional support services when their requirements surpass the capabilities of the school's SW-PC personnel (Ministry of Education and Training, 2023a).

4.1.2. Organizational structure and responsibilities of members in the expended social work and psychological counseling model within general education institutions

According to the SW-PC model put forth by the Ministry of Education and Training, the author has formulated an expanded model for Social Work and Psychological Counseling that is suitable for general education institutions as detailed below:

Figure 2. Diagram of the organizational structure for the expanded social work and psychological counseling model in general education institutions



Source: The author fomulates

The organizational framework of the enhanced SW-PC model illustrates an interdisciplinary, interconnected, and integrated support system focused on students. It activates multi-tiered support mechanisms both within the school and in the surrounding community. At the heart of this model is the SW-PC Team, which acts as the primary unit tasked with organizing and executing support initiatives while also liaising with other stakeholders. This team comprises not only full-time specialists but is also augmented by concurrent-duty teachers who have undergone fundamental training in school social work and psychological counseling. Their participation broadens the implementation scope and improves student outreach and accessibility.

A significant advancement of the model is the formal integration of community counselors - external specialists including psychologists, healthcare professionals, and social work authorities who can work alongside the school via contractual agreements or project-based collaborations. The involvement of this group enhances the professional expertise of the model, especially in addressing complex or delicate cases that surpass the specialized skills of in-school personnel.

The model further underscores the importance of a community-oriented approach to education, emphasizing the active participation of parents and external stakeholders, including local authorities, social organizations, healthcare providers, and social protection agencies. This approach guarantees that psychosocial interventions are not limited to the classroom but are expanded and incorporated into the wider living environment of the students.

Significantly, the model incorporates digital transformation by creating a Digital Support Unit

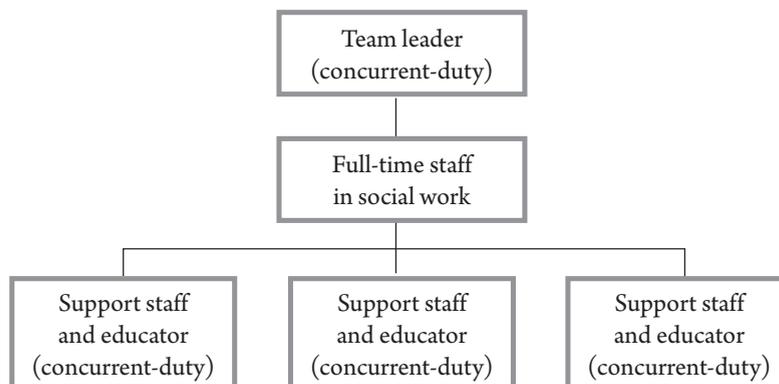
tasked with the digitization of counseling and support services, managing feedback systems, implementing early warning mechanisms, and constructing a digital repository of life skills resources. This strategy is in line with contemporary trends in educational technology and allows students to receive support in a confidential, adaptable, and ongoing way even in the absence of face-to-face meetings with counselors.

The complete model functions under the cohesive guidance of the school management board, which guarantees legal validity, strategic orientation, and alignment with the school’s comprehensive educational framework. This aspect is crucial for the establishment of the legitimacy and sustainability of Social Work – Psychological Counseling initiatives within the broader educational context.

In summary, the expanded SW-PC model not only inherits the strengths of the current framework but also incorporates practical enhancements: expanding human resources, strengthening professional expertise, integrating technology, and fostering community engagement. Together, these elements create a comprehensive, continuous, and sustainable support ecosystem for students within the context of modern education.

In this framework, the SW-PC Team holds a crucial position. It consists of the following personnel: one Team Leader (part-time), one full-time expert in social work and psychological counseling, along with several concurrent-duty support staff and educators. The quantity of part-time support staff may fluctuate based on the particular circumstances of each educational institution (Ministry of Education and Training, 2023b). The organizational structure of the SW-PC Team is depicted in the diagram below:

Figure 3. Structure of the SW-PC Team in general education institutions



Source: Ministry of Education and Training, 2023b

The SW-PC Team is tasked with screening and identifying at-risk students to recommend interventions to the school management board; executing preventive programs for students, teachers, and parents in diverse formats; offering both individual and group counseling; referring high-risk students to specialized external services; and documenting their activities for the school, as well as for the district or provincial Departments of Education and Training.

The SW-PC Team Leader is designated by the school management board and is tasked with supervising operations, formulating periodic activity plans, coordinating professional endeavors, preparing outcome reports, and engaging with specialized service providers in social work and psychological counseling. This person must hold professional qualifications and certification in social work or psychological counseling, have a comprehensive understanding of child protection laws, and exhibit pedagogical skills, management abilities, communication expertise, and the capacity to coordinate across various sectors.

The full-time SW-PC specialist may be appointed on a permanent basis or engaged through a contract. Their duties encompass planning and implementing student screening, intervention, and counseling; coordinating with the semi-specialist support team; creating intervention case files; referring complex cases to external services; collaborating with experts; and preparing reports. They are required to possess a relevant degree or certification in social work or school psychology, exhibit strong skills in working with children, have a comprehensive understanding of developmental stages, uphold strict confidentiality, and demonstrate professionalism, patience, and empathy.

The SW-PC team comprises support staff and educators, including homeroom teachers, Chief young pioneer leader, school health personnel, the Youth Union secretary, and a parent representative. They perform tasks delegated by the team leader, aid in student screening, facilitate the execution of activities, tackle arising issues, and collaborate with the full-time specialist to guarantee the efficient provision of services.

The parent representative is involved in the creation of activity plans, assists in the execution

of services, oversees their implementation, fosters collaboration among fellow parents, and aids in the mobilization of resources to promote SW-PC initiatives within the educational institution.

4.2. Operation process of the social work and psychological counseling model in general education institutions

In this research, the author utilizes the operational framework of the school-based SW-PC model as specified by the Ministry of Education and Training (2023b). Each activity adheres to a specific protocol, as described below:

4.2.1. Screening and risk identification activities for students

- *Purpose:* To collect information regarding the needs of students, their family circumstances, and any difficulties encountered by students, parents, and educators; to pinpoint school-wide concerns that necessitate preventive measures; to identify individual cases that require support or intervention; and to direct students to suitable external services when needed.

- *Methods:* Utilizing questionnaires crafted by the SW-PC team; conducting informal interviews; gathering reports from homeroom teachers and parents; receiving messages through the team's mailbox or voluntary disclosures from students; and collecting information from volunteers, etc.

- Implementation Process:

+ *Step 1. Create a system for receiving information:* The SW-PC team serves as the primary unit for gathering information from diverse sources, including the team's mailbox, hotline messages, the school's official fan page, and reports from homeroom or subject teachers, parents, or peers.

+ *Step 2. Create screening instruments to identify students at risk or in need of intervention:* The SW-PC team designates the specialist counselor to develop tools and scales for screening student-related issues. These instruments may utilize standardized measurement scales for assessing student mental health and behavior or be formulated based on reports from students, teachers, and parents to determine which issues should be prioritized for resolution.

+ *Step 3. Conduct screening and assessment of student issues:* The SW-PC team performs direct screenings of student issues utilizing assessment forms and

evaluation scales. Additionally, the team collects reports from teachers and parents concerning the challenges that students are encountering. Surveys and assessment tools are distributed to teachers and parents to assist in identifying students who require support or to uncover broader issues present in the classroom or school environment.

+ *Step 4. Process the information, filter cases, compile a list of student issues, and formulate an intervention plan:* After gathering information from various sources, the SW-PC team must ascertain: What issues are students experiencing within the school? What factors are contributing to these issues? What do students require in order to resolve them? What actions ought the SW-PC team undertake to tackle the problem?

4.2.2. Preventive activities for student issues in schools

- *Purpose:* The objective is to provide students, teachers, and parents with the necessary knowledge and skills to assist students in preventing and managing school-related challenges. Additionally, it seeks to improve teachers' and parents' comprehension of psychological difficulties and fundamental support techniques tailored to each age group, allowing them to identify student struggles and offer preliminary assistance.

- *Target groups for preventive activities:* Students, teachers, and parents.

- *Process for implementing preventive activities:* Conduct assessments to identify the needs of students, teachers, and parents; select and develop suitable prevention programs; the SW-PC team presents the program to the school management board for approval; finalize the plan and initiate implementation; the SW-PC team executes the preventive activities; assess the effectiveness of the program.

- *Contents of preventive programs:*

+ *For students:* Emphasizes self-awareness, peer relationships, interactions with teachers and parents, and addressing school-related challenges such as school violence, sexual abuse, substance use and addiction, and safe social media practices. The SW-PC team also enhances students' comprehension of core values and life skills through focused educational programs.

+ *For teachers:* Addresses essential topics such as fostering a safe and positive school environment;

understanding the psychological and physical development of children across various age groups; implementing positive discipline strategies; recognizing and addressing behavioral and psychological challenges among students; skills for counseling and supporting students; and awareness of contemporary school issues including school violence, cyberbullying, internet-related dangers, mental health, gender and reproductive health, and adolescent relationships, etc.

+ *For parents:* Offers insights into the psychological and social needs of children at various developmental stages; parenting strategies and positive discipline techniques that promote child engagement; and skills to assist children in preventing and coping with school violence, sexual abuse, online threats, reproductive health concerns, gender, and adolescent love and relationships.

4.2.3. Intervention and support activities for addressing student issues in schools

- *Purpose:* To empower students, parents, teachers, and the community to enhance their capabilities and independently resolve their own issues.

- *Forms of intervention:* Individual and group-based support.

- *Intervention Process:*

+ *For individual interventions:* Receive the student, teacher, or parent and schedule support sessions; establish rapport and collect relevant information; assess and identify the issue; develop and implement a support plan; evaluate progress, close the case, and file documentation.

+ *For group interventions:* Gather individuals with similar support needs; initiate preliminary contact and interaction with students to explore the issues; design a session plan for group support; conduct the formal group counseling/support session; assess outcomes and close the group case.

4.2.4. Referral and networking activities

- *Purpose:* To enable the sharing of ideas, resources, services, and expertise among individuals and institutions in diverse settings, with the aim of collaboratively tackling the challenges encountered by students, school staff, and teachers as part of a holistic support framework.

- *Referral and networking process:* Implemented through the following steps: Comprehend the requirements of students, educators, parents, and

the community in terms of the resources that are insufficient and the support that is necessary; Evaluate and identify the suitable resources that can fulfill these needs or aid in the problem-solving process. Enable students, teachers, and parents to connect with these external support resources.

5. Conclusion and recommendations

5.1. Conclusion

This paper has put forth a SW-PC model, which is grounded in both theoretical and practical foundations. It presents a well-defined organizational structure, clear responsibilities, and an efficient operational process. The model prioritizes not only interventions and direct support for students but also highlights the importance of preventive measures and awareness-raising initiatives aimed at teachers, parents, and the wider community.

Moreover, it is vital to have a team that is well-qualified, professionally trained, and sufficiently resourced for the model to operate effectively. Regular training and professional development initiatives are necessary to improve the capabilities of school-based SW-PC personnel. Additionally, securing financial resources from the state budget, domestic and international organizations, and community contributions is essential for the sustainable upkeep and advancement of the model. Sufficient facilities, particularly safe and private counseling areas will create conducive conditions for students to freely express their concerns and obtain timely assistance.

To guarantee the model's effectiveness, it is crucial to establish a system for ongoing monitoring and evaluation to modify activities based on the actual needs of students. Moreover, effective implementation necessitates the collaborative efforts of multiple stakeholders, including educational authorities, schools, parents, social organizations, and community.

5.2. Recommendations for effectively operating the social work and psychological counseling model in general education institutions

To improve the effective functioning of the SW-PC

model within general education environments, the following recommendations are proposed:

Firstly, reinforce the legal and policy framework: Establish clear regulations governing the organization and functioning of the SW-PC model in educational institutions, including comprehensive guidance on the roles and responsibilities of its members. Incorporate the model into the educational curriculum to enhance awareness of mental health issues among students, teachers, and parents.

Secondly, ensure the availability of qualified human resources: Recruit and train full-time personnel with the necessary certifications. Offer professional development opportunities for concurrent-duty teachers in the SW-PC team. Create a network of collaborators and volunteers to aid in the screening, prevention, and intervention efforts for students at high risk.

Thirdly, improve coordination among schools, families, and communities: Establish effective communication channels between the SW-PC team, homeroom teachers, parents, and social organizations. Collaborate with specialists, healthcare providers, and psychological support centers for case referrals. Organize workshops and training sessions for parents on topics related to school psychology.

Fourthly, secure funding and infrastructure: Allocate budgetary resources from school finances and external sources to ensure the sustainability of operations. Create private, student-friendly counseling spaces. Seek funding from NGOs and businesses to support training initiatives and provide assistance to underprivileged students.

Fifthly, implement regular evaluations and improvements: Continuously monitor and evaluate the effectiveness of the model, gathering feedback from students, teachers, and parents to enhance counseling services. Utilize data analysis to propose strategies aimed at improving the quality and impact of the model.

REFERENCES

- Adelman, H. S., & Taylor, L. (Eds.). (2009). *Mental health in schools: Engaging learners, preventing problems, and improving schools*. Corwin Press.
- Bac, N.V, Phu, N.B., Khuyen, L.V. & Hoa, D.V. (2022). The current state of psychological counseling for students in high schools in Phu Vang District, Thua Thien Hue Province. *Hue University Journal of Science: Social Sciences and Humanities*, 131(6A), 19–29.

- Bac, N.V. (2012). *Psychological counseling at Hue University of Education: Current status and development solutions*. In Proceedings of the 3rd International Conference on School Psychology: Developing Models and Skills for School Psychology Practice, Ho Chi Minh City University of Education (pp. 128-134). Ho Chi Minh City University of Education Publishing House.
- Dimmitt, C., Carey, J. C., & Hatch, T. (2007). *Evidence-based school counseling: Making a difference with data-driven practices*. Corwin Press.
- Dryfoos, J. G. (1994). *Full-service schools: A revolution in health and social services for children, youth, and families*. Jossey-Bass.
- Franklin, C., Harris, M. B., & Allen-Meaers, P. (Eds.). (2012). *The school services sourcebook: A guide for school-based professionals*. Oxford University Press.
- Government of Vietnam. (2017a). *Decree No. 56/2017/NĐ-CP detailing the implementation of certain provisions of the Law on Children*, issued on May 9, 2017, effective from July 1, 2017.
- Government of Vietnam. (2017b). *Decree No. 80/2017/NĐ-CP on creating a safe, healthy, and friendly educational environment and preventing school violence*, issued on July 17, 2017, effective from September 5, 2017.
- Kham, T.V. (2016). *Theories and practice models in social work: Historical development and implications for social work development in Vietnam*. In Proceedings of the International Conference on Social Work Education in Vietnam, University of Labour and Social Affairs (Campus 2), (pp. 1-15). <https://doi.org/10.13140/RG.2.1.1532.4246>
- Khoa, N.A. & Tuong, N.V. (2020). *The psychological support model for students at Tuệ Đức High School: A coordinated approach between school and family*. Proceedings of the International Scientific Conference on Psychology and Education for the Development of Students and Happy Schools, Hanoi National University of Education (pp. 844-889). Vietnam Education Publishing House.
- Ministry of Education and Training. (2017). *Circular No. 31/2017/TT-BGDĐT guiding the implementation of psychological counseling for students in general education institutions*, issued on December 18, 2017, effective from February 2, 2018.
- Ministry of Education and Training. (2018). *Circular No. 33/2018/TT-BGDĐT guiding social work activities in schools*, issued on December 26, 2018, effective from February 10, 2019.
- Ministry of Education and Training. (2023a). *Circular No. 20/2023/TT-BGDĐT guiding job positions, the structure of civil servant titles, and staffing norms for general education institutions and public specialized schools*, issued on October 30, 2023, effective from December 16, 2023.
- Ministry of Education and Training. (2023b). *Decision No. 1480/QĐ-BGDĐT approving the guideline materials for implementing the school social work and psychological counseling model in general education institutions in Hanoi*, issued and effective from May 24, 2023.
- Ministry of Education and Training. (2024). *Circular No. 11/2024/TT-BGDĐT stipulating the classification codes, professional title standards, and salary scale for student counselors in general education institutions and public specialized schools*, issued on September 18, 2024, effective from November 4, 2024.
- Ministry of Education and Training. (2025). *Decision No. 1311/QĐ-BGDĐT dated May 13, 2025, on the issuance of a training program aligned with the professional title standards for student counselor civil servants*.
- Ministry of Labour, Invalids and Social Affairs. (2017). *Circular No. 01/2017/TT-BLĐTBXH stipulating the ethical standards for social work professionals*, issued on February 2, 2017, effective from March 19, 2017.
- Mui, N.T. (2009). *Developing a school counseling office model in high schools*. In Proceedings of the International Scientific Conference: Needs, Orientation, and Training of School Psychology in Vietnam, Institute of Psychology - Vietnam Academy of Social Sciences (pp. 289-300).
- National Assembly. (2016). *Law on Children*. Law No. 102/2016/QH13. National Political Publishing House - Truth.
- National Assembly. (2019). *Law on Education*. Law No. 43/2019/QH14. National Political Publishing House - Truth.
- Phuong, N.T.H (2009). *School counseling and the current demand for counseling among lower secondary students*. Proceedings of the International Scientific Conference: Needs, Orientation, and Training of School Psychology in Vietnam, Institute of Psychology - Vietnam Academy of Social Sciences (pp. 43-51).
- Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (2000). School as a context of early adolescents' academic and social-emotional development: A summary of research findings. *The elementary school journal*, 100(5), 443-471.
- Teasley, M. L. (2018). *School social work: Practice, policy, and research*. Oxford University Press.
- Thang, L.V. & Van, N.T.T. (2024). Current situation of school counseling management for lower secondary students in Pleiku City, Gia Lai Province. *Vietnam Journal of Education*, 23(Special Issue 11), 187-191.
- United Nations. (1990). *Convention on the Rights of the Child*. Ratified by the Government of Vietnam in 1990. <https://www.unicef.org/vietnam/vi/cong-uoc-quoted-ve-quyen-tre-em>
- World Health Organization (2021). *Adolescent mental health*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>

IMPROVING THE EFFECTIVENESS OF LABOUR MEDIATORS AND LABOUR ARBITRATION COUNCIL IN RESOLVING LABOUR DISPUTES IN HA NOI CITY

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Abstract: The comprehensive execution of the stipulations outlined in the 2019 Labour Code introduces a variety of new obligations for industrial relations, as well as for labour mediators and the Labour Arbitration Council in addressing labour disputes. Given that Hanoi serves as Vietnam's political nucleus and a significant economic center, the stability of industrial relations in the city directly affects not only its socio-economic development metrics but also has a considerable impact on surrounding regions and the country at large. This document provides a summary of the present situation regarding labour disputes and their resolution by labour mediators and the Labour Arbitration Council in Hanoi. Through this examination, the paper puts forth several insights and suggestions directed at both the authorities in Hanoi and the Ministry of Home Affairs, with an emphasis on enhancing the efficiency of labour dispute resolution. These suggestions encompass: reorganizing and fortifying organizational structures; guaranteeing operational conditions; improving capabilities through training; and offering technical assistance to labour mediators and the Labour Arbitration Council.

Keywords: Labour disputes, labour dispute resolution institutions, labour mediators, labour arbitration councils, strikes.

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1. Introduction

Throughout the process of socio-economic development especially in the framework of swift industrialization, modernization, and extensive international integration, industrial relations in Vietnam as a whole, and in Hanoi in particular, have grown increasingly varied and intricate. This intricacy has resulted in an increase in labour disputes, both on

an individual and collective basis, which directly affect the rights and interests of the parties involved. If these disputes are not resolved promptly and in accordance with legal standards, they may threaten the stability of the investment climate, political security, and social order and safety.

In the labour dispute resolution framework, labour mediators and labour arbitration councils are

essential in assisting parties to reach a consensus, thus averting the escalation of conflicts into strikes or extended litigation. These intermediary mechanisms alleviate the pressure on the court system and foster dispute resolution grounded in respect for the parties' autonomy, mutual agreement, and negotiation, thereby guaranteeing empathy, fairness, reasonableness, and efficiency regarding both time and cost.

Nonetheless, the actual implementation of labour mediation and arbitration efforts in Hanoi has uncovered various challenges and constraints. A significant number of labour mediators do not possess specialized training or hands-on experience, resulting in their activities often being more procedural than meaningful. While labour arbitration councils have been formed, their role has not been clearly demonstrated, as the volume of cases submitted for arbitration continues to be quite minimal. Additionally, ineffective coordination between these bodies and state management agencies, coupled with a lack of awareness among both workers and employers about these dispute resolution methods, presents considerable obstacles.

Considering the pressing demands of reality, enhancing the efficiency of labour mediators and labour arbitration councils is an essential task that has been highlighted in significant directives from both the Party and the State. Specifically, Directive No. 37-CT/TW, dated September 3, 2019, issued by the Party Secretariat, emphasizes the need to strengthen Party's leadership and direction in building harmonious, stable, and progressive industrial relations within the new context. This was subsequently followed by Decision No. 416/QĐ-TTg, dated March 25, 2020, issued by the Prime Minister, which delineates the action plan for implementing Directive No. 37-CT/TW. Therefore, it is essential not only to improve the legal framework but also to emphasize the enhancement of human resource quality, increase training in mediation and arbitration skills, strengthen organizational structures, and improve coordination mechanisms among all stakeholders.

This article aims to analyze the current operations of labour mediators and labour arbitration councils in Hanoi, identifying existing deficiencies and their underlying causes. It also suggests specific solutions to enhance the quality and effectiveness of these mechanisms in the present context. Through this analysis, the paper seeks to contribute to the promotion of harmonious and stable industrial relations, safeguarding the legitimate rights and interests of all parties involved, and furthering the objectives of

sustainable development and social welfare in the capital.

2. Literature review and methodology

2.1. Literature review

In the realm of theoretical research, scholars like Michael Salamon (2000) and John W. Budd (2008) have established the essential theoretical issues in industrial relations, presenting several internationally recognized models that address various aspects of industrial relations systems. The Ministry of Labour, Invalids and Social Affairs (2014) examined Vietnam's industrial relations model from both legal and practical perspectives, suggesting solutions to develop and enhance a system that aligns with the country's specific conditions. Significantly, a ministerial-level scientific initiative by the Center for Industrial Relations Development (CIRD) (2020) elucidated the theoretical and practical underpinnings of Vietnam's dispute resolution system, particularly in the context of engaging in new-generation free trade agreements. Consequently, it recommended enhancements to the model for addressing collective labour disputes.

In the realm of empirical research, national reports and studies conducted by expert groups regarding the implementation of international labour standards such as the reports from the IMF expert group (2006) and the European Union (2015) have yielded valuable data concerning the evolution of various facets of industrial relations across different nations. A scientific project at the ministerial level, initiated by the CIRD (2014), assessed the current status of labour mediation performed by grassroots labour mediators, labour arbitration councils, and the judicial system, while also suggesting measures to enhance their efficacy. Hội (2017), in the publication "Mediation in the Resolution of Labour Disputes under Current Vietnamese Law", emphasized both the significance and the limitations of legal regulations governing labour dispute mediation when implemented in practice. The article "Resolution of Individual Labour Disputes through Mediation – Some Issues and Solutions" authored by Nhung (2020) elucidated the legal provisions pertaining to the mediation of individual labour disputes and identified existing deficiencies and inconsistencies within the legal framework. Furthermore, it offered recommendations for legal reform and practical enhancements aimed at improving the effectiveness of mediation in the resolution of individual labour disputes.

Numerous studies have been undertaken to examine, enhance, and suggest improvements for the

effectiveness of the labour dispute resolution system, focusing on industrial relations broadly and the specific mechanisms and institutions involved in resolving labour disputes. Nevertheless, many of these studies have failed to thoroughly explore the complete array of mechanisms and institutions present in the labour dispute resolution system, particularly considering the new regulations established by the 2019 Labour Code, which are now in effect.

2.2. Research methodology

Concerning the theoretical framework, this paper predominantly utilizes the analytical–synthetic method. It specifically concentrates on examining various viewpoints regarding industrial relations (IR), labour disputes (LDs), and the resolution of LDs in accordance with international practices and the legal frameworks of various nations. The references employed encompass international labour standards, national labour legislation, and domestic academic perspectives as articulated in monographs, textbooks, and pertinent literature. Drawing from the gathered and analyzed perspectives, the paper integrates these findings to establish definitions of IR and LDs, while also investigating the mechanisms and institutional structures involved in the resolution of LDs.

In terms of practical considerations, the paper employs both qualitative and quantitative research methodologies. The qualitative approach involves the collection and analysis of data pertaining to labour disputes and resolutions through comprehensive interviews with tripartite industrial relations specialists, as well as through reports published by the Ministry of Labour, Invalids and Social Affairs. These reports include the “Report on the Implementation of Directive No. 37-CT/TW dated September 3, 2019 by the Party Secretariat,” the “Report on the Development and Implementation of the Industrial relations Development Project,” and the “Industrial relations Report,” among others.

In the quantitative research methodology, data were gathered from reports published by tripartite industrial relations agencies located in Hanoi, including reports concerning the execution of Directive No. 37-CT/TW and the advancement and implementation of the Industrial relations Development Project.

The data collection was facilitated through surveys and comprehensive interviews carried out by the CIRDP. The survey targeted 100 labour mediators and labour arbitrators; 20 officials from state labour management

agencies; 280 employer representatives; and 600 employees from diverse sectors within Hanoi.

3. Theoretical framework on industrial relations

Industrial relations (IR) are conventionally defined, in their most limited interpretation, as the relationship between employees and employers regarding wage-based employment. Nevertheless, in light of contemporary societal evolution, the notion of IR has broadened to include relationships that involve the representative organizations of both employees and employers, along with their interactions with governmental institutions. Despite this expanded definition, the essential and most critical element of IR continues to be the relationship between the employee and the employer. The state primarily assumes a supportive role, creating the legal framework, aiding in the establishment of mechanisms for dialogue and negotiation, and intervening in the processes of dispute resolution.

Economic interest acts as the main motivating factor that drives both employees and employers to participate in and sustain industrial relations. Within this dynamic, the employees’ interest is focused on securing income, whereas the employers’ interest centers on profit. In the short term, these interests frequently clash, as employees’ income tends to have an inverse relationship with employers’ profits. Consequently, inherent tensions often arise. When these tensions escalate beyond a certain point, they become evident as labour disputes. Thus, labour disputes are an unavoidable outcome in a market economy.

Labour disputes encompass both individual and collective labour disputes. Collective labour disputes not only adversely impact the production and business environment but also present potential threats to social order and stability. As a result, nations with market economies have developed systems of mechanisms and institutions to address such disputes. These systems generally include mediation (conducted by labour mediators), labour arbitration (by labour arbitration councils), adjudication (by the courts), and strikes. Among these:

Mediation: This process involves the assistance of a third party to aid the disputing parties in reaching a mutually acceptable resolution. The mediator does not issue a binding decision but instead facilitates the parties by offering information, negotiation strategies, situational assessments, and suggestions for possible solutions. In the labour sector, the entity responsible for mediation can be either an individual labour mediator

or a labour dispute mediation organization. Each country organizes and operates its labour mediation institution in a distinct manner.

Labour Arbitration: This process entails a third party rendering a binding decision regarding the dispute, based on legal principles and the reasonableness of the claims in accordance with prevailing labour market standards. For a case to be eligible for arbitration, both disputing parties must agree to submit it to the labour arbitration body. Once a decision is made, both parties are required to adhere to it. Labour arbitration is not classified as a judicial process. The institutional body that performs arbitration functions within the labour sector is typically the Labour Arbitration Council. In most nations, this council operates as an independent entity, separate from both employees and employers.

Adjudication: Legal proceedings conducted by a court. Any party involved in the conflict may initiate a case with the court for resolution. Once a decision is made by the court, both parties are legally required to adhere to it. Judgment enforcement agency ensures that the court’s ruling is executed appropriately.

Strike: A strike represents a collective action where

employees voluntarily stop working, in line with legal regulations, to apply pressure on the employer to meet their demands. Strikes are typically viewed as a last resort in resolving disputes, as they often have negative effects on business operations, employment, and the income of workers.

4. Research findings

4.1. Number of enterprises and labour scale by type of enterprise

According to the Hanoi People’s Committee (2024), there are approximately 2.5 million individuals employed in enterprises throughout the city. Out of this figure, 80.28% (which is roughly 2 million workers) are engaged in domestic private enterprises, while 13.8% (around 345,000 workers) are found in foreign direct investment (FDI) enterprises.

As of March 2024, Hanoi is home to about 209,000 registered and operational enterprises with recorded business activities. This total comprises 315 state-owned enterprises, 203,000 domestic private enterprises, and 5,685 FDI enterprises. Furthermore, 714 enterprises are functioning within industrial zones. It is noteworthy that enterprises with fewer than 10 employees represent 63% of the overall total.

Table 1. Number of enterprises and employees working in enterprises in Hanoi (2019 - Q1/2024)

Indicator	Unit	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year Q1/2024
Number of active enterprises	Enterprises	141,439	144,692	149,283	189,037	198,000	209,000
- State-owned Enterprises	Enterprises	418	395	399	354	320	315
- Private Enterprises	Enterprises	137,265	140,158	144,821	183,759	192,000	203,000
- Foreign Direct Investment (FDI) Enterprises	Enterprises	2,756	4,139	4,063	4,924	5,680	5,685
Number of employees working in enterprises	Thousand persons	2,409	2,178	2,182	2,345	2,400	2,500
- Employees in State-owned Enterprises	Thousand persons	187	162	164	152	150	148
- Employees in Domestic Private Enterprises	Thousand persons	1,900	1,690	1,674	1,851	1,908	2,007
- Employees in FDI Enterprises	Thousand persons	322	325	344	341	342	345

Source: Report on the implementation of Directive No. 37-CT/TW by the City of Hanoi

4.2. Labour dispute situation

Regarding the overall labour force engaged in enterprises, the quantity of documented individual labour disputes (ILDs) in Hanoi is notably low. Official

statistics indicate that the number of ILDs reported in 2019, 2020, 2021, 2022, 2023, and the first quarter of 2024 were 50, 82, 56, 79, 86, and 28 cases, respectively. Nevertheless, in numerous situations, workers facing

disputes with their employers chose not to seek dispute resolution through labour mediators. Instead, they directed their complaints to state authorities or decided

to resign from their positions as an alternative means of resolution.

Table 2. Comparison of individual labour disputes in Hanoi and selected provinces (2019–2023)

Unit: case

Province/City	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023
Hanoi	50	82	56	79	86
Dong Nai	118	98	76	153	59
Bac Ninh	30	31	46	44	16
Binh Duong	323	404	207	215	286

Source: Reports on the implementation of Directive No. 37-CT/TW from localities

Concerning collective labour disputes, the report indicates that there were no illegal strikes documented in Hanoi from September 2019 through the first quarter of 2024. Nevertheless, there were 38 instances of collective work stoppages and mass gatherings (13 of which were classified as collective work stoppages and 25 as mass gatherings. These occurrences were primarily concentrated in 2020, coinciding with the COVID-19 pandemic, which included 5 collective work stoppages and 12 mass gatherings). In practice, the statistical categorization of collective labour disputes frequently varies due to differing interpretations of terms such as “strikes not adhering to lawful procedures” and “collective work stoppages.” Many contend that a “procedurally unlawful strike” must first be acknowledged as a “strike.” Consequently,

if a group of employees collectively halts work without the organization and leadership of their official representative body, such an action does not legally constitute a strike. In reality, there have been no collective work stoppages in Hanoi that were organized and led by employees’ representative organizations.

The reported number of collective labour disputes (CLDs) for the years 2019, 2020, 2021, 2022, and 2023 were 20, 11, 12, 19, and 23, respectively. In the initial five months of 2024, 5 such cases were recorded. The majority of these disputes pertained to interests rather than rights. The primary issues of contention included wage arrears, requests for increased wages, Tet bonuses, social insurance benefits, and other welfare matters such as fuel allowances and the quality of meals provided during work shifts.

Table 3. Number of collective labour disputes in Hanoi compared to selected provinces (2019–2023)

Unit: case

Province/City	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023
Hanoi	20	11	12	19	23
In which					
Interest disputes	12	6	8	11	14
Rights disputes	8	5	4	8	9
Hochiminh	15	11	8	13	7
Quang Nam	2	1	1	2	0
Thanh Hoa	7	2	0	3	3
Hai Phong	5	6	2	2	2

Source: Reports on the implementation of Directive No. 37-CT/TW from localities

4.3. Institutions for labour dispute resolution in Hanoi

Concerning the institutions responsible for mediating labour disputes, the report reveals that

there are presently 98 labour mediators in Hanoi whose appointments are still valid. The majority of these mediators work part-time, primarily employed by the Department of Labour, Invalids and Social

Affairs (DOLISA); district-level DOLISA offices; the Department of Justice; the Labour Federation; and various other organizations. Each year, DOLISA conducts one to two training sessions focused on legal knowledge and professional skills for mediators. Nevertheless, most mediators have not undergone systematic or comprehensive training. Although the city has established regulations governing the management of mediators, in practice, this workforce remains fragmented and lacks continuity. From 2019 to 2023, the success rate for individual labour dispute mediations was around 50%. In practice, disputes arising within labour relations between employees and employers occur frequently and are predominantly addressed by labour inspectors. When confronted with individual disputes, employees typically opt to

file complaints directly with state agencies instead of submitting formal mediation requests. As per Hanoi's report on the execution of the Industrial relations Development Project, in 2020 alone, the City's Labour Inspectorate received and resolved 548 petitions and complaints from employees. The number of complaints received by the city's labour inspection agency in 2022, 2023, and the first half of 2024 were 202, 315, and 187, respectively.

With respect to arbitration, the Hanoi Labour Arbitration Council has been restructured in line with the new provisions of the Labour Code and now comprises 21 members. However, as of now, no labour dispute cases have been resolved through this council.

4.4. Labour dispute resolution

Table 4. Labour dispute resolution in Hanoi (2019 – Q1/2024)

Indicator	Unit	2019	2020	2021	2022	2023	Q1/2024
Number of labour mediators	Persons	89	99	110	121	121	98
Number of individual labour disputes (ILDs)	Cases	50	82	56	79	86	28
Number of ILDs successfully mediated	Cases	26	44	27	24	41	15
Number of collective labour disputes (CLDs)	Cases	20	11	12	19	23	5
Number of CLDS mediated by labour mediators	Cases	0	0	0	0	0	0
Number of CLDS resolved by labour arbitration council	Cases	0	0	0	0	0	0

Source: Report on the implementation of Directive No. 37-CT/TW by the City of Hanoi

Concerning individual labour disputes: In numerous instances where conflicts arise between individual employees and their employers, workers frequently lodge complaints with local state management agencies, seeking intervention to ensure that enterprises adhere to legal regulations and safeguard their legitimate rights and interests. Upon receipt of such complaints, government officials utilize legal provisions, enterprise regulations, labour contracts, and previously established agreements to directly counsel the employee or mandate the employer to fulfill their legal obligations. Individual labour disputes presented in court generally pertain to the unilateral termination of labour contracts or disciplinary dismissals involving managerial personnel or highly skilled technical specialists within enterprises.

Concerning collective labour disputes: The majority of collective labour disputes manifest as collective work stoppages and are not resolved

through labour mediators or the Labour Arbitration Council. The resolution of these matters largely hinges on the response of inter-agency task forces and the swift engagement of pertinent authorities and organizations. When a collective work stoppage occurs, members of the task force are promptly dispatched to the location to engage with both employees and employers, collaborate with the grassroots trade union to understand workers' demands, evaluate the actual conditions of the enterprise, and encourage employers to heed and implement necessary policy changes. Concurrently, they strive to persuade workers to return to their jobs to uphold social order. As a result of these initiatives, workers frequently resume their duties shortly after employers make certain concessions. In situations where the employer makes decisions or enacts policies that do not align with legal regulations, such decisions or policies must be revised accordingly and are liable to legal penalties as stipulated by law.

4.5. Accessibility of labour dispute resolution mechanisms

Survey findings reveal that both employees and employers face restricted access to mediation and arbitration institutions. Numerous workers do not possess thorough information and comprehension

of labour mediation and arbitration processes. This deficiency in awareness is a significant factor contributing to the reluctance of many employees to seek mediation for disputes, opting instead to submit petitions to state authorities for resolution.

Table 5. Workers’ choices when facing labour disputes

Content	Workers’ Choice	Percentage (%)
Workers’ preferred approach to resolving labour disputes:	(1) Labour mediator or Labour Arbitration Council	19.33
	(2) City or district-level labour management authority	55.67
	(3) Litigation in court	16.67
	(4) Other	8.33

Source: Survey conducted by the CIRD

4.6. Working conditions and factors affecting the effectiveness of labour mediators

Survey findings from labour mediators reveal that the primary obstacles affecting their efficiency consist of: An overwhelming workload at their main place of

employment (82%); mediation being an extremely challenging and time-intensive endeavor (59%); insufficient collaboration or goodwill from both employees and employers (53%); and unsatisfactory compensation and benefits for mediators (46%).

Table 6. Factors affecting the Q1/2024 effectiveness of labour dispute mediation by labour mediators

Content	Labour Mediators’ Choices	Percentage (%)
What are the most critical negative factors impacting the mediation of labour disputes by labour mediators?	(1) An excessive workload at their primary place of employment	82
	(2) Mediation is a challenging and time-intensive endeavor	59
	(3) Absence of clear management and performance assessment for labour mediators	27
	(4) Lack of coordination and professional support systems for labour mediators	36
	(5) Overly cumbersome procedures for mediation, documentation, and recordkeeping	21
	(6) Insufficient compensation and benefits for labour mediators	46
	(7) The process of paying for labour mediators is excessively complex	18
	(8) Inadequate facilities (e.g., filing cabinets, computers, transportation)	32
	(9) Insufficient goodwill and collaboration from employees or employers	53

Source: Survey conducted by the Center for Industrial Relations Development

During in-depth interviews, numerous labour mediators indicated that the primary obstacles in executing their duties consist of insufficient financial allowance, a deficiency in technical assistance, and

most importantly the lack of goodwill from employers. The current pay for mediators is remarkably low, and the majority refrain from utilizing the reimbursement process due to its intricacy and ambiguity.

In organizations where labour conflicts arise, mediators frequently are not given responsibilities pertaining to the support of industrial relations, which results in their lack of access to information regarding industrial relations within the organization. Consequently, they are unable to foster trust or develop collaborative relationships with employers. This disengagement significantly undermines their capacity to mediate effectively when disputes occur.

5. Insights and recommendations

5.1. Key insights

According to the results of this study, several significant insights can be derived concerning labour disputes and their resolution methods in Hanoi:

Although the officially documented individual LDs are relatively few, a considerable number of disputes are actually resolved through complaints and prompt intervention by local labour management officials, rather than through formal dispute resolution processes.

Collective labour disputes are primarily focused on interests rather than legal entitlements. In recent years, there has been an increase in the occurrence of collective LDs. Nevertheless, none of these disputes have been settled through labour mediators or the Labour Arbitration Council.

Both employees and employers demonstrate a lack of awareness and access to labour mediation and arbitration services.

The current compensation for labour mediators and arbitrators is insufficient, and the reimbursement process is ambiguous and excessively complicated, despite the challenging and time-intensive nature of their responsibilities.

The lack of a system that allows labour mediators and the Labour Arbitration Council to fulfill their role in supporting industrial relations within companies could lead to diminished trust and goodwill from employers towards these entities, consequently complicating the mediation process considerably when labour disputes occur.

5.2. Recommendations

- For Hanoi City

(1) Swiftly enhance and finalize the organizational framework of the focal unit tasked with handling labour dispute resolution requests, as mandated by the Labour Code. Special emphasis should be placed on establishing operational guidelines and the coordination framework between the focal unit and labour mediators as well as labour arbitrators to facilitate dispute resolution and bolster industrial relations within enterprises.

(2) Transform communication methods and openly share the contact details of the focal unit, labour mediators, and the Labour Arbitration Council to improve accessibility and public understanding of labour dispute resolution services.

(3) Raise the compensation levels in line with the time investment and intricacy of labour dispute mediation and industrial relations support activities. Concurrently, clearly outline and streamline reimbursement processes to ensure that mediators and arbitrators can receive their allowances fully in accordance with established regulations.

(4) Designate each labour mediator and arbitrator to oversee and assist industrial relations in enterprises with a significant workforce within the city. Create enterprise industrial relations support documentation for archiving, management, and shared utilization by the focal unit responsible for receiving labour dispute resolution requests.

- For the Ministry of Home Affairs

(1) Organize training sessions aimed at enhancing the professional skills and knowledge of labour mediators and labour arbitrators in line with the stipulations of the Labour Code, while also addressing the changing needs of industrial relations in the present environment.

(2) Assist in the execution of responsibilities pertaining to industrial relations development that are assigned to labour mediators and the Labour Arbitration Council, as mandated by the Labour Code, to improve state management and effectively resolve collective labour disputes in the contemporary context.

REFERENCE

- Central Executive Committee. (2019). *Directive No. 37-CT/TW on strengthening leadership and direction in building harmonious, stable, and progressive industrial relations in the new context*.
- Ministry of Labour, Invalids and Social Affairs. (2014). *The model of industrial relations in Vietnam*. Science and Technology Publishing House.
- Government of the Socialist Republic of Vietnam. (2020). *Decree No. 145/2020/NĐ-CP detailing and guiding the implementation of certain articles of the Labour Code on working conditions and industrial relations*.
- Department of Industrial relations and Wages. (2018). *Reforming state management of industrial relations*. Ministerial-level scientific research project. Ministry of Labour, Invalids and Social Affairs.
- Cuong, N. M. (2010). On the system of industrial relations in a nation. *Journal of Labour and Social Affairs, Issues 351–352*.
- David Macdonald & Caroline Vardenabeele. (1996). *Glossary of industrial relations terms and related terminology*.
- Hoi, D. X. (2017). *Mediation in the resolution of labour disputes under current Vietnamese law* (Doctoral dissertation). Vietnam Academy of Social Sciences.
- IMF. (2006). *Report on Industrial Relations and working conditions in IMF – related TNCs in China*.
- John W. Budd. (2008). *Industrial relations, striking and balance*.
- EU. (2015). *Report on Industrial relations in Europe*.
- Micheael Salamon. (2000). *Industrial relations, Theory and practice*.
- Nhan, N. T. M. (2010). *Improving state management of industrial relations in Vietnamese enterprises* (Doctoral dissertation). University of Commerce.
- Nhung, K. T. P. (2020). *Mediation in the resolution of individual labour disputes – Existing shortcomings and proposed solutions*. *Journal of Prosecutorial Science*, Issue No. 42/2020.
- National Assembly of the Socialist Republic of Vietnam. (2019). *Law No. 45/2019/QH14: Labour Code*.
- Tiep, N. (2008). *Industrial relations Textbook*. Labour and Social Affairs Publishing House.
- CIRD Support. (2011). *ILO Conventions and Recommendations on Industrial relations*. Labour and Social Affairs Publishing House.
- CIRD Support. (2014). *Improving the effectiveness of labour mediation to prevent and resolve labour disputes*. Ministerial-level scientific research project. Ministry of Labour, Invalids and Social Affairs.
- CIRD Support. (2021). *Labour Mediation and Arbitration Practices*. Labour Publishing House.
- Ho Chi Minh City University of Law. (2010). *Conference Proceedings: Mechanisms for Resolving Collective Labour Disputes in Vietnam – Challenges and Recommendations for Improvement*.
- Hanoi People’s Committee. (2014). *Decision No. 5261/QĐ-UBND approving the Project “Development of Industrial relations in Hanoi for the Period 2014–2020.”*
- Hanoi People’s Committee. (2020). *Plan No. 131/KH-UBND on the Implementation of Directive No. 37-CT/TW dated September 3, 2019 by the Party Secretariat on Strengthening Leadership in Building Harmonious, Stable, and Progressive Industrial relations in the New Context*.
- Hanoi People’s Committee. (2024). *Report on the 5-Year Review of the Implementation of Directive No. 37-CT/TW dated September 3, 2019 by the Party Secretariat and Decision No. 416/QĐ-TTg dated March 25, 2020 by the Prime Minister*.

CURRENT STATUS OF SUSTAINABLE URBAN DEVELOPMENT IN VIETNAM

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Abstract: Sustainable urban development has been recognized as a fundamental goal in Resolution No. 06-NQ/TW, dated January 24, 2022, issued by the Politburo regarding the planning, construction, management, and sustainable development of Vietnam's urban system through 2030, with a vision extending to 2045. This article aims to examine the current status of sustainable urban development in Vietnam from 1986 to the present day, utilizing the measurement criteria established by the four pillars of sustainable urban development as outlined in the analytical framework of the United Nations Department of Economic and Social Affairs (UN DESA, 2013). The analysis indicates that economic development, social development, and effective urban governance are the three pillars that have shown significant advancement. These advancements encompass improvements in labor productivity, the stimulation of economic growth, job creation, poverty alleviation, and an enhanced quality of life. Nevertheless, challenges persist, especially concerning environmental protection related to urban waste management and the lack of climate-resilient infrastructure. In light of these findings, the article proposes several policy recommendations aimed at promoting sustainable urban development in Vietnam in the forthcoming period.

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1. Introduction

Resolution No. 06-NQ/TW, dated January 24, 2022, issued by the Politburo, regarding the planning, construction, management, and sustainable development of Vietnam's urban system with a target year of 2030 and a vision extending to 2045 sets forth objectives to elevate the national urbanization rate to at least 45% by 2025 and to surpass 50% by 2030. By the year 2025, it is anticipated that all urban areas will have implemented comprehensive master plans, zoning plans, and initiatives focused on urban renovation, upgrading, reconstruction, and development. Additionally, it is required that at least 100% of urban areas classified as Class III or higher meet the necessary criteria for urban classification, particularly regarding infrastructure in healthcare, education and training, and cultural facilities at the urban level. By 2030, the strategy is designed to create multiple national and

regional urban centers that will meet urban standards in healthcare, education and training, and culture, aligning with the average standards of urban areas in the top four ASEAN member states. By the year 2030, guarantee the universal access to broadband fiber-optic Internet services and 5G mobile network services, ensuring that more than 80% of the adult urban population has electronic payment accounts. Enhance the urban economic sector's contribution to the national GDP to about 75% by 2025 and approximately 85% by 2030. It is anticipated that the digital economy's share in the Gross Regional Domestic Product (GRDP) of centrally administered cities will average between 25% and 30% by 2025, and between 35% and 40% by 2030 (Central Committee of the Communist Party of Vietnam, 2022). Resolution No. 06-NQ/TW outlines a vision for 2045, with the objective of transforming Vietnam into a nation characterized by an urbanization rate that ranks

within the upper-middle tier of the ASEAN region and Asia. The urban framework is anticipated to establish a cohesive and synchronized network, ensuring balance across various regions, while demonstrating robust resilience and adaptability to climate change, natural disasters, and epidemic prevention, alongside environmental protection, and showcasing unique, green, modern, and intelligent architectural designs. The strategy encompasses the development of at least five cities that are internationally recognized, which will act as pivotal hubs for both regional and global connectivity and advancement. The urban economic structure is set to progress towards modernity, with green and digital economies constituting a substantial share. (Central Committee of the Communist Party of Vietnam, 2022).

On August 22, 2024, the Prime Minister endorsed Decision No. 891/QĐ-TTg, which approves the Master Plan for the Urban and Rural System for the period spanning 2021 to 2030, with a vision extending to 2050. In this context, the development strategy outlined in this Master Plan aims to leverage the strengths of the nation, regions, and localities to position urban areas as pivotal engines of the country's economic advancement. Concurrently, it is crucial to establish modern rural areas, enhancing robust urban-rural connections and facilitating rural urbanization. The spatial arrangement of urban and rural regions should be thoughtfully organized to guarantee balanced development across various regions and provinces. Furthermore, the Plan underscores the importance of ensuring the availability of infrastructure services, particularly in the domains of culture, sports, healthcare, and education, while progressively reducing the development disparities among cities and between urban and rural settings. (Prime Minister, 2024).

In accordance with this vision and strategic directions, evaluating the present condition of sustainable urban development in Vietnam, thus aiding in the evaluation of the advancements made towards fulfilling the defined strategic goals, while also pinpointing limitations, opportunities, and challenges within the urbanization process, is an urgent responsibility not only for policymakers but also for the academic community. This is especially pertinent in a context where sustainable urbanization objectives are intricately linked with national sustainable development goals and international obligations regarding climate change adaptation. Therefore, performing such an analysis in accordance with the normative analytical frameworks established by international organizations carries substantial theoretical and practical significance.

This article seeks to examine the present condition of sustainable urban development, utilizing the criteria for evaluating the value of sustainable urban development as specified in the analytical framework provided by the United Nations Department of Economic and Social Affairs (UN DESA, 2013). By evaluating both the accomplishments and the current limitations and challenges, the article presents essential policy solutions aimed at advancing sustainable urban development in Vietnam in the near future, thus aiding in the successful realization of the development objectives established in Resolution No. 06-NQ/TW.

2. Overview of research and theoretical foundations of sustainable urban development

2.1. The concept of urban areas and urbanization

An urban area refers to a residential environment where a community of individuals resides in close proximity and primarily participates in non-agricultural economic activities. Urban areas are essential in fostering both local and national socio-economic progress. While the definition of an urban area may differ from one country to another, two primary criteria are typically employed to establish urban status: (i) a population exceeding 2,000 individuals residing in concentrated regions, with a population density surpassing 3,000 persons per square kilometer within the urban core; and (ii) a labor structure where over 65% of the workforce is involved in non-agricultural jobs.

In Vietnam, Article 3 of the 2009 Law on Urban Planning regulates *"an urban is defined area as a densely populated region where most activities occur in non-agricultural economic sectors. This area functions as a center for political, administrative, economic, cultural, or specialized purposes, contributing to the socio-economic advancement of the nation, a territorial region, or a locality. It encompasses both the inner and outer urban areas of a city, as well as the inner and outer urban areas of a town, including townships.*

The criteria for urban classification in Vietnam are established in accordance with Clause 1, Article 1 of Resolution No. 26/2022/UBTVQH15, which modifies and adds to Article 2 of Resolution No. 1210/2016/UBTVQH13 (Standing Committee of the National Assembly, 2022). In this regard, five criteria for urban classification are outlined, which include:

- (i) Location, function, role, structure, and level of socio-economic development.
- (ii) Population size.
- (iii) Population density.
- (iv) Proportion of non-agricultural labor.
- (v) Level of development of infrastructure, architecture, and urban landscape that meets the

standards specified in Appendix 1 attached to Resolution No. 1210/2016/UBTVQH13.

As stated by the World Bank (2020), the urban classification system of Vietnam serves as the essential basis for its urban development policy. This system includes over 800 designated “urban areas” that are divided into six distinct categories. Notably, the special-class urban areas (Class 0) consist of Hanoi and Ho Chi Minh City. Class 5 urban areas are made up of townships and wards. Beyond the five cities governed centrally, there are 68 provincial cities categorized into Class 1 (which includes 14 relatively large urban areas), Class 2 (comprising 24 medium-sized urban areas), or Class 3 (which contains 30 small urban areas). Towns can be classified as either Class 3 or Class 4, whereas townships are designated as either Class 4 or Class 5.

According to the World Bank (2020), the concept of an urban area is interpreted or calculated differently at various governmental levels in Vietnam. Within the administrative framework of the country, the term urban area is employed to statistically categorize over 800 units identified by the urban classification system. This system includes provincial-level units (Class 0), district-level units (Classes 1, 2, and 3), and commune-level units (certain segments of Class 3 and 4 urban areas, as well as all of Class 5). In practice, an urban unit at a lower administrative tier may be encompassed within a rural unit at a higher administrative tier. For instance, numerous townships (which are classified under Class 4 and Class 5 urban areas) are subordinate to district-level units. These districts may, in turn, be part of centrally governed cities. However, the Population and Housing Census employs a different methodology to calculate the urban population, leading to an alternative assessment of the proportion of the population residing in urban areas (which reflects the urbanization rate). Specifically, the urban population is comprised of individuals living in officially designated urban areas, which are defined solely at the commune level, including wards and townships. Consequently, substantial population groups that are officially categorized as rural may inhabit the boundaries of centrally governed cities or provincial cities (such as districts in Hanoi and Ho Chi Minh City). Conversely, large population clusters that are officially recognized as urban may fall under the jurisdiction of rural districts.

Urbanization is the process by which the proportion of the urban population increases in relation to the total population, alongside the spread of urban lifestyles into rural regions. From a geographical standpoint, urbanization signifies the growth in spatial area, population density, commercial activities, or other

functions within a specific region over time. The processes involved in urbanization may encompass: (i) The natural growth of the existing population. Generally, this is not the main driving force, as the natural growth rate of the population in urban settings is usually lower than that in rural areas; (ii) The movement of individuals from rural regions to urban centers; (iii) Or a combination of both elements. At present, there are two prevalent models of urban development worldwide: horizontal and vertical development. Horizontal development can be interpreted as geographical expansion, which frequently includes administrative expansion as well. Vertical development pertains to qualitative enhancements in urban areas, especially through the improvement of urban social infrastructure (General Statistics Office & United Nations Population Fund, 2016).

2.2. The concept and criteria for measuring the value of sustainable urban development

Sustainable urban development is recognized as a fundamental component of sustainable development and signifies a dominant trend in the evolution of cities globally, including in Vietnam. While there are various definitions of sustainable urban development, there is a widespread agreement in the literature that a sustainable urban area is one that attains stable progress across economic, social, and environmental aspects. In such a city, both present inhabitants and future generations lead fulfilling lives, with access to comprehensive welfare and essential public services, good health, safety and security, education, and fair treatment. Furthermore, they are empowered to maintain and value cultural identity, history, religion, and beliefs, while possessing the right to care for and safeguard the landscape and environment.

According to UN DESA (2013) and the Ministry of Construction & GIZ (2019), sustainable urbanization includes the economic, social, and environmental aspects of the urbanization process, ensuring that urban development addresses current needs while also safeguarding and improving the quality of life for future generations. Specifically, UN DESA (2013) identified four fundamental pillars of sustainable urban development, which are:

(i) Sustainable economic development: This involves ensuring that urban economic growth is paired with the generation of quality job opportunities, the encouragement of innovation, and the enhancement of productivity, all while reducing economic inequality within urban communities.

(ii) Inclusive social development: This ensures that all urban inhabitants have fair access to essential services such as education, healthcare, housing, and social

welfare, while also fostering community involvement in decision-making processes.

(iii) Environmental conservation: Efficiently managing and utilizing natural resources, reducing pollution and adverse environmental effects, while improving urban resilience against climate change and natural disasters.

(iv) Efficient urban governance: Creating a transparent, accountable, and responsive urban management framework that addresses the needs of residents, while promoting collaboration among various levels of government and stakeholders.

Social equity encompassing equality in income distribution outcomes serves as a fundamental criterion for assessing the value of sustainable urban development.

Furthermore, an examination of earlier research underscores the scientific basis and empirical data regarding the connection between sustainable urban development and the Sustainable Development Goals (SDGs). According to UN-Habitat (2022), sustainable urban development serves not only as a strategic goal but also as a fundamental tool for realizing the SDGs, especially Goal 11, which seeks to ensure that cities and human settlements are inclusive, safe, resilient, and sustainable. Likewise, both the OECD (2016) and the World Bank (2020) have validated the beneficial effects

of urbanization on labor productivity and economic growth. Nevertheless, urbanization also introduces specific limitations and challenges, including rising inequality and environmental pollution, fragmented governance, and negative effects on sustainable development goals (Zhao, 2019; Liu et al., 2021; Ahluwalia, 2020; Srisatit et al., 2022).

In Vietnam, urbanization has played a crucial role in fostering economic growth and alleviating poverty. Nevertheless, it still faces significant challenges, including fragmented infrastructure, inadequate land management, and limited environmental resilience (World Bank, 2020; Lâm & Hằng, 2021; Hà Thanh, 2023; Ministry of Construction & GIZ, 2019).

Consequently, although prior research has investigated the current status of sustainable urban development in relation to the Sustainable Development Goals, a thorough analytical framework for evaluating sustainable urban development in Vietnam has not been extensively studied. Thus, this research seeks to offer an objective analysis of the present condition of sustainable urban development in Vietnam, utilizing specific criteria to assess the value of sustainable urban development based on the analytical framework established by UN DESA (2013), as outlined in Table 1.

Table 1. Criteria for measuring the value of sustainable urban development based on the analytical framework of UN DESA (2013)

Pillar of sustainable urban development	Measurement criteria
1. Economic development	<ol style="list-style-type: none"> 1. Efficient green growth 2. Creation of sustainable employment 3. Production and distribution of renewable energy 4. Technology and innovation
2. Effective urban governance	<ol style="list-style-type: none"> 1. Decentralization and planning 2. Reduction of inequality 3. Strengthening civil and political rights 4. Supporting local, national, regional, and global connectivity
3. Social development	<ol style="list-style-type: none"> 1. Education and healthcare 2. Nutrition and food safety 3. Green housing and buildings 4. Clean water and sanitation 5. Green public transportation 6. Access to clean energy 7. Recreational spaces and community support
4. Environmental protection	<ol style="list-style-type: none"> 1. Forest and land management 2. Waste management and recycling 3. Energy efficiency 4. Water management (including freshwater) 5. Air quality conservation 6. Climate change adaptation and mitigation

Source: Author's translation from UN DESA (2013)

3. Research methodology and data

This research utilizes a blend of two methodologies: the analytical-synthetic method and the descriptive statistical method. The analytical-synthetic method is employed to organize the theoretical underpinnings of sustainable urban development through an examination of prior studies. Moreover, this method serves to present an overview of the socio-economic landscape, as well as to evaluate, compare, and contrast achievements and shortcomings, with the aim of suggesting solutions to enhance sustainable urban development in Vietnam.

In addition, the descriptive statistical method, which relies on data sourced from the World Bank, the General Statistics Office (GSO), and various earlier studies, offers empirical insights for assessing the current status of sustainable urban development in Vietnam over recent years. The data were obtained from the World Bank's open data repositories and the official site of the General Statistics Office (currently the Statistics Department under the Ministry of Finance). Subsequently, the data were compiled and visualized using Microsoft Excel 365 software.

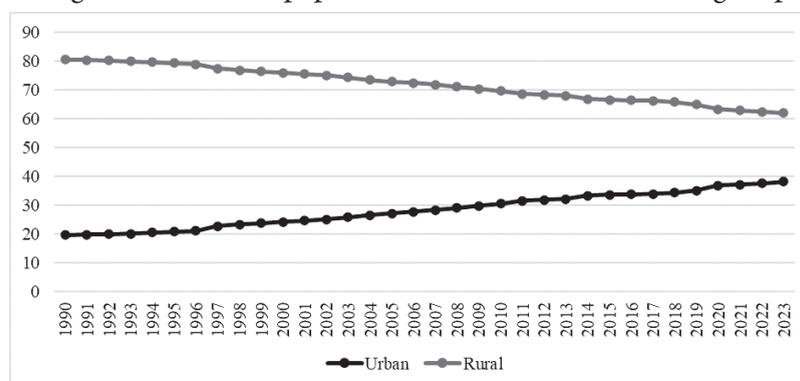
4. The current state of sustainable urban development in Vietnam from 1986 to the present

This section aims to evaluate the current status

of sustainable urban development in Vietnam since the Đổi Mới (Renovation) reforms initiated in 1986. It begins with an overview of the extent and speed of urbanization within the country. Following this, it analyzes and assesses the degree of sustainable urban development in Vietnam, utilizing selected criteria from all four pillars of sustainable development as outlined in the UNDESA (2013) analytical framework. This analysis culminates in a general assessment of the successes and challenges faced in sustainable urban development in Vietnam from 1986 to the present.

In recent years, Vietnam's urban system has experienced notable advancements in both the quantity of urban areas and the pace of urbanization. By the end of 2022, Vietnam boasted a total of 888 urban areas across various categories, which are relatively well-distributed throughout the nation. The urbanization rate, defined by areas designated for urban functions, rose from 30.5% in 2010 to 35.7% in 2015, reaching nearly 40% in 2020 and 41.5% in 2022 (Kinh tế & Đô thị Newspaper, 2023). Data released by the General Statistics Office, as illustrated in Figure 1, further indicate that urbanization is taking place in both urban and rural settings. Importantly, the trend of urbanization within designated urban regions continues to increase.

Figure 1. The average urban and rural population structure in Vietnam during the period 1990-2023



Source: The author compiled and illustrated from data provided by the General Statistics Office.

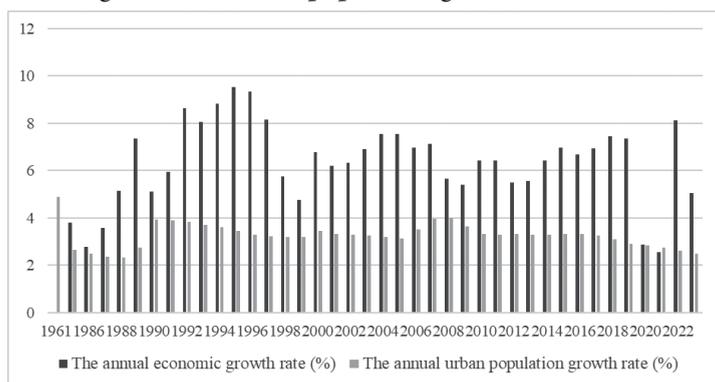
According to the analytical framework established by UN DESA (2013), sustainable urban development in Vietnam has created value across all four pillars of sustainable development.

In terms of the economic development pillar, the promotion of green growth and the establishment of sustainable employment associated with enhanced labor productivity have produced significant results in Vietnam's sustainable urban development in recent years. These two factors serve as the primary criteria for assessing the value of sustainable urban

development within the economic development pillar (refer to Table 1). Specifically:

Urbanization has played a crucial role in Vietnam's economic growth, providing a foundation for the advancement of green growth. Urban development has unequivocally confirmed its importance in propelling the country's economic expansion. Data released by the World Bank (see Figure 2) illustrate a positive relationship between economic growth and the urban population growth rate in Vietnam from 1985 to 2023.

Figure 2. The economic growth and urban population growth rate in Vietnam from 1985 to 2023



Source: The Author compiled and illustrated from data provided by World bank

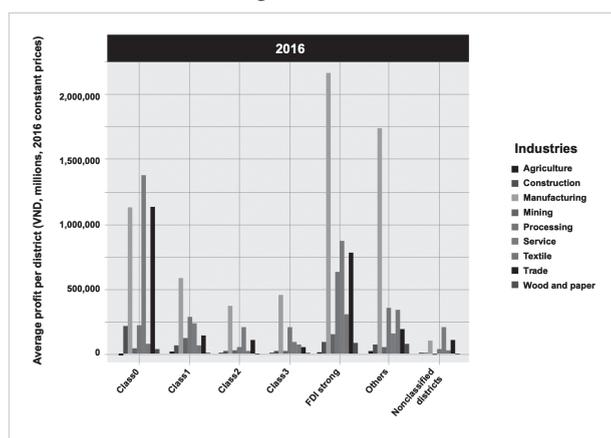
Data released by the General Statistics Office also shows that the urban economy has sustained a robust growth rate, averaging between 12% and 15% annually, which is 1.2 to 1.5 times greater than the national economic growth rate, contributing roughly 70% to the country’s GDP. Significantly, the five centrally governed cities, despite representing only 2.9% of the land area and approximately 22% of the population, accounted for 46.8% of the total GDP, attracted 30% of the cumulative foreign direct investment (FDI), and made up 32.8% of the total import-export turnover of the country in 2020 (Lam & Hang, 2021).

Currently, to execute the National Green Growth Strategy, the urbanization process is being progressively refined regarding planning, mechanisms, and policies to promote the development of green-growth cities. A green-growth city is characterized as one that achieves economic growth and development through urban policies and initiatives aimed at minimizing negative impacts on the environment and natural resources (Ministry of Construction, 2018).

Urbanization plays a significant role in enhancing productivity and improving the efficiency of various economic sectors. While there are disparities in productivity based on enterprise size between Hanoi and Ho Chi Minh City, it is observed that highly productive enterprises in both the manufacturing and service sectors are primarily located in these two major urban areas. Nevertheless, within the manufacturing sector, a larger number of suburban districts in Hanoi and Ho Chi Minh City are categorized as high productivity compared to the inner-city districts of both cities. In contrast, the service sector shows that high-productivity districts are mainly found in the inner-city regions.

According to the World Bank (2020), the performance of foreign direct investment (FDI) enterprises varies considerably across urban areas. Districts with a high concentration of FDI demonstrate significantly higher profit levels than those in other urban types, even exceeding the profit levels found in Class 0 urban areas highlighting the effectiveness of capital concentration and illustrating economies of scale. Additionally, it is important to note that there exists a considerable disparity in average profit per district between Class 0 urban areas and those classified as Class 2 or Class 3, especially within the manufacturing and service sectors (Figure 3).

Figure 3. The average profit per district/city based on urban type and the group of districts/cities concentrating FDI in Vietnam, 2016



Note: Districts characterized by a high concentration of Foreign Direct Investment (FDI) are those in which foreign companies employ over 20,000 individuals.

Source: World Bank (2020), compiled from data provided by the General Statistics Office of Vietnam, Enterprise Census 2016.

Nevertheless, the trend of rising labor productivity has decelerated in regions with elevated urbanization rates. This phenomenon can be partially explained by the principle of diminishing returns to scale. However, in practice, an additional factor contributing to this issue is the existing urbanization model, which entails the conversion of land for the development of fragmented, small-scale industrial zones and urban projects. The rate of land-use conversion has surpassed both population growth and job creation. Major urban centers such as Hanoi and Ho Chi Minh City are experiencing significant disparities in population density between urban and suburban regions, which adversely affects the efficiency of resource distribution

and diminishes the role of urbanization in enhancing labor productivity.

Concerning the pillar of effective urban governance, the reduction of poverty and the mitigation of inequality are two critical factors that signify the importance of sustainable urban development.

Urbanization plays a role in alleviating poverty. As illustrated in Table 2, the poverty rate has markedly decreased in all cities since 2016. Nevertheless, the pace of this decline has been more pronounced in cities with lower rates of urbanization, while it has been relatively slower in cities with higher urbanization rates, such as Hanoi, Ho Chi Minh City, and Da Nang.

Table 2. Urbanization and labor productivity in Vietnam

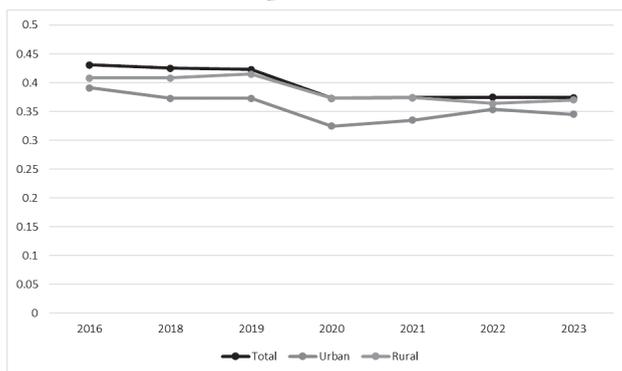
No.	Locality	Urbanization rate in 2023 (%)	Labor productivity in 2022 (million VND/person/year)	Labor productivity Growth Rate in 2022	Poverty Rate in 2016 (according to the Government's multidimensional poverty standard for the 2016–2021 period)	Poverty Rate in 2023 (according to the Government's multidimensional poverty standard for the 2022–2025 period)
1	Da Nang	87.45	198.4	-0.018	1.5	0.9
2	Binh Duong	84.32	259.4	0.029	1.1	0.1
3	Ho Chi Minh City	77.77	332.1	0.075	0.2	0
4	Can Tho	70.5	185.7	0.134	4.6	0.9
5	Quang Ninh	67.5	405.7	0.155	4.3	1.1
6	Ba Ria - Vung Tau	58.48	675.5	0.090	1.3	0.6
7	Thua Thien - Hue	52.81	114.2	0.091	7.3	3.3
8	Bac Ninh	51.32	327.3	0.059	1.9	1
9	Hanoi	49.05	304.1	0.092	1.4	0.1
10	Hai Phong	45.58	356.8	0.152	2.1	0.3
...
60	Son La	13.98	110	0.062	42.8	19.8
61	Tuyen Quang	13.88	110.7	0.119	22	7.4
62	Ben Tre	13.33	82.3	0.083	10.1	2.4
63	Thai Binh	11.81	111.5	0.087	4.7	1.5

Source: The author compiled and illustrated from data provided by the General Statistics Office and Trang (2023)

This scenario partially illustrates the nonlinear connection between urbanization levels and trends in poverty reduction. This connection can be further elucidated and demonstrated by the wealth disparity between urban and rural regions in

recent years. Despite the gradual narrowing of the Gini coefficient gap between urban and rural areas, the coefficient for urban regions has begun to rise again in recent years (Figure 4), coinciding with the current rapid urbanization process.

Figure 4. The Gini coefficient by living region in Vietnam period 2016-2023



Source: The author compiled and illustrated from data provided by the General Statistics Office

Concerning the social development pillar, enhancing the quality of life through improved sanitation, access to clean water, and advancements in education and healthcare services are two essential criteria that validate the progress made in sustainable urban development in Vietnam. In particular, urbanization has played a significant role in enhancing quality of life by generating employment opportunities and decreasing unemployment rates. The unemployment rate among the working-age population in urban regions has exhibited a downward trend, falling from 4.3% in 2010 to 2.97% in 2022, thus establishing a foundation for better living standards. The national average life expectancy rose from 73.3 years in 2015 to 73.7 years in 2020, with areas experiencing higher levels of urbanization reporting greater average life expectancy compared to other regions. Moreover, urbanization is intricately associated with elevated standards in education and healthcare services, as well as minimum requirements for sanitation and access to clean water highlighting the importance of human-centered sustainable urban development. Regarding living conditions, access to clean water in urban settings saw significant improvement during the 2011-2020 timeframe, leading to enhanced sanitation and public health outcomes in urban communities (Huy, 2023). Nevertheless, the quality of domestic water supply in certain urban areas remains inconsistent due to pollution of water sources and the effects of climate change (Doanh nghiệp & Thương hiệu, 2023).

Concerning the environmental protection pillar, in accordance with the goals of climate change adaptation, urban development in Vietnam has gradually made progress in decreasing emissions, enhancing energy efficiency, and alleviating the effects of climate change. In prominent cities such as Hanoi,

Ho Chi Minh City, and Da Nang, a variety of strategies aimed at improving energy efficiency and lowering emissions have been put into action. In Hanoi, the commencement of the Cat Linh - Ha Dong urban railway line in 2021 has played a role in decreasing the number of private vehicles, thus enhancing air quality and reducing carbon emissions (Khanh, 2025). In Ho Chi Minh City, rooftop solar power systems have been deployed in numerous government offices and educational institutions, in addition to efforts to encourage the development of green buildings as part of urban planning initiatives (Chi, 2024).

In addition to the accomplishments, certain challenges persist in the quest for sustainable urban development in Vietnam. The degree of urbanization in Vietnam is still considerably lower than that of other developing nations in East Asia and the Pacific. Since the initiation of the Đổi Mới reforms in 1986, which spans 25 years, Vietnam has experienced a significant acceleration in urban population growth, gradually reducing the disparity with other countries in the region. Nevertheless, the rate of urbanization has continued to lag behind that of several other nations (World Bank, 2020). Significantly, after achieving its peak average annual urbanization rate of 2.2% during the period from 2000 to 2010, this rate has begun to exhibit signs of a slowdown. The information depicted in Figure 2 also clearly demonstrates the recent decline in the pace of urbanization in Vietnam.

Furthermore, the advancement of infrastructure has not matched the speed of urban growth, leading to urgent issues like traffic congestion and inadequate resilience against the effects of climate change in key urban areas. The progress in social housing continues to encounter considerable obstacles and has yet to satisfy the rising demand from a growing urban populace, which is largely influenced by migration from rural to urban areas. The rate of informal employment in cities remains elevated, and the continuous evolution of the labor market amid the national digital transition introduces additional challenges to maintaining social welfare in urban environments (Thanh, 2023).

Overall, Vietnam has made significant strides in sustainable urban development across all four pillars of sustainability. Alongside the expanding scale and speed of urbanization, this process has played a vital role in fostering economic growth and is increasingly contributing positively to greengrowth, the establishment of sustainable jobs, income improvement, and poverty alleviation. These accomplishments are noteworthy within the realms of economic development and effective urban

governance. Moreover, sustainable urban development has yielded crucial outcomes in the environmental and social pillars, such as aiding environmental protection through initiatives aimed at reducing emissions and optimizing energy resource usage, as well as improving access to quality education and healthcare services, which in turn enhances the overall quality of life.

However, Vietnam continues to face several limitations and challenges, including an urbanization rate that remains relatively low compared to other countries in the region, an underdeveloped and fragmented infrastructure system, and insufficient resilience to climate change. In addition, emerging trends such as rural-to-urban migration and the digital transformation of the labor market are creating new demands and requirements for sustainable urban development in Vietnam in the coming period.

5. Strategies for promoting sustainable urban development in Vietnam

Vietnam has made notable advancements in sustainable urban development across the four fundamental pillars of sustainability. Nonetheless, the nation still encounters various limitations and challenges stemming from the urbanization process, which affects the results of sustainable urban development. Consequently, to attain more favorable results in sustainable urban development and to further amplify the impact of urbanization on fostering sustainable development, Vietnam needs to persist in bolstering the contribution of sustainable urban development across all four dimensions of sustainability: economic, social, environmental, and governance.

For the economic development pillar: it is crucial to further align the urbanization process with the objective of green growth by implementing policies that encourage the production and consumption of renewable energy in urban settings. Ongoing support for the advancement of smart cities and green cities should also be prioritized. Simultaneously, it is vital to promote sustainable employment throughout the urbanization process through various initiatives, such as enhancing the quality of the urban workforce by enacting policy solutions that bolster the labor market, including facilitating labor market matching to increase productivity during the structural transformation of employment linked to the urbanization of rural regions. Specifically, in the context of the Fourth Industrial Revolution, equipping the workforce with digital skills is essential for improving Vietnam's labor productivity.

For the pillar of effective urban governance: ensuring social equity throughout the urbanization

process is a fundamental requirement for achieving sustainable urban development. It is imperative to enhance the incomes of informal workers and vulnerable labor groups, particularly those engaged in rural-to-urban migration. Furthermore, inequalities in access to opportunities and essential services, especially for migrant workers must be adequately addressed. Currently, numerous workers migrating from rural regions to major cities encounter substantial obstacles in obtaining healthcare, education, and housing due to bureaucratic challenges and elevated living expenses. Consequently, social protection policies need to be broadened and modified to guarantee that all citizens, irrespective of their household registration status, receive equal rights and benefits. The development of social housing, the provision of free basic healthcare services, and the enhancement of working conditions in industrial zones are vital solutions. Simultaneously, targeted policies aimed at supporting vulnerable groups, including women, individuals with disabilities, and low-income workers should be executed in a coordinated fashion to ensure that all segments of the population can equitably benefit from the urbanization process.

Regarding the environmental protection pillar: it is crucial to improve the efficiency of waste management by implementing various strategies, including the promotion of circular economy models and boosting investment in urban waste collection and treatment systems.

Concerning the social development pillar: urban development should consider the necessity to adjust to the effects of climate change, which encompass natural disasters and epidemics. It is imperative to create resilient infrastructure capable of enduring natural disasters and guaranteeing the delivery of healthcare services during challenging conditions brought about by climate change.

CONCLUSION

This research underscores the significant accomplishments in sustainable urban development in Vietnam, which include: (i) fostering economic growth through green initiatives and the establishment of sustainable job opportunities; (ii) fulfilling the standards for effective urban governance, as evidenced by the decrease in urban poverty and enhancements in the Gini coefficient; (iii) promoting social advancement through better access to and quality of education, healthcare, and clean water, thus improving the overall quality of life; and (iv) progressively broadening and enhancing the effectiveness of environmental protection strategies and climate change adaptation within the urbanization framework.

Simultaneously, sustainable urban development in Vietnam continues to encounter limitations and challenges, especially concerning the environmental protection aspect. Drawing from the evaluation of the

current status of sustainable urban development, this study offers policy suggestions designed to encourage further advancements in sustainable urban development in Vietnam amidst the ongoing evolving circumstances.

REFERENCES

- Ahluwalia, I. J. (2019). Urban governance in India. *Journal of Urban Affairs*, 41(1), 1-17. <https://doi.org/10.1080/07352166.2016.1271614>
- Central Committee of the Communist Party of Vietnam. (2022). *Resolution No. 06-NQ/TW, dated January 24, 2022, issued by the Politburo, regarding the planning, construction, management, and sustainable development of Vietnam's urban system with a target year of 2030 and a vision extending to 2045.*
- Chi, T. (2024). *Promoting the Development of Green Buildings Towards Sustainable Smart Urban Development.* Government Electronic Newspaper. Retrieved from <https://thanglong.chinhphu.vn/thuc-day-phat-trien-cong-trinh-xanh-huong-toi-xay-dung-do-thi-thong-minh-ben-vung-103241003175043138.htm>
- Doanh nghiệp & Thương hiệu. (2023). *Current State of Urban Domestic Water Quality Management.* Retrieved from <https://doanhnghiepthuonghieuvn/thuc-trang-quan-ly-chat-luong-nuoc-sinh-hoat-tai-do-thi-hien-nay-53031982-p51188.html>
- General Statistics Office & United Nations Population Fund. (2016). *2014 Intercensal Population and Housing Survey: Migration and Urbanization in Vietnam.* Vietnam News Agency Publishing House, Hanoi. Retrieved from https://www.gso.gov.vn/wp-content/uploads/2019/05/Chuyen_khao_di_cu.compressed.pdf
- Huy, T. (2023). *Managing Urban Domestic Water Quality: Harmonizing Interests Between the State, Enterprises, and Citizens.* People's Army Newspaper. Retrieved from <https://www.qdnd.vn/xa-hoi/cac-van-de/quan-ly-chat-luong-nuoc-sinh-hoat-tai-do-thi-hien-nay-phai-hai-hoa-loi-ich-giua-nha-nuoc-doanh-nghiep-va-nguoi-dan-755605>
- Kinh tế & Đô thị Newspaper. (2023). *Creating a Breakthrough in Urbanization.* Retrieved from <https://kinhthedothe.vn/tao-dot-pha-trong-do-thi-hoa.html>
- Khanh, L. (2025). *Hanoi and Ho Chi Minh City Aim to Restrict High-Emission Vehicles.* Dai Doan Ket Newspaper – Central Organ of the Vietnam Fatherland Front. Retrieved from <https://daidoanket.vn/ha-noi-va-tp-ho-chi-minh-huong-toi-han-che-cac-loai-phuong-tien-phat-thai-cao-10302457.html>
- Lam, V. T. & Hang, N. T. D. (2021). *Urban Development in Vietnam: Toward 2030 Goals and Vision to 2045.* Communist Review. Hanoi. Retrieved from https://www.tapchicongsan.org.vn/en/web/guest/tieu-kiem1/-/asset_publisher/sSL7xhQjJeKe/content/phat-trien-do-thi-o-viet-nam-huong-toi-muc-tieu-den-nam-2030-tam-nhin-den-nam-2045
- Liu, Y., Wu, F., & Chen, M. (2021). Urban transformation in China: A case of urban sustainable development. *Urban Studies*, 58(4), 765–784. <https://doi.org/10.1177/0042098020931306>
- Ministry of Construction. (2018). *Circular No. 01/2018/TT-BXD on Indicators for Green Growth Urban Development.* Retrieved from https://thuvienphapluat.vn/van-ban/Xay-dung-Do-thi/Thong-tu-01-2018-TT-BXD-quy-dinh-chi-tieu-xay-dung-do-thi-tang-truong-xanh-371919.aspx?anchor=dieu_2
- Ministry of Construction & GIZ (2019). *Report on Sustainable Urbanization in Viet Nam: Recommendations to Improve the Legal Framework.* GIZ Vietnam.
- National Assembly of Vietnam. (2009). *Law No. 30/2009/QH12: Law on Urban Planning.* Retrieved from <https://vanban.chinhphu.vn/?pageid=27160&docid=91026>
- OECD. (2016). *The Productivity-Inclusiveness Nexus.* Organisation for Economic Co-operation and Development. https://www.oecd.org/en/publications/2016/06/the-productivity-inclusiveness-nexus_g1g6929a.html
- Prime Minister of Vietnam. (2024). *Decision No. 891/QĐ-TTg dated August 22, 2024, on the Approval of the Master Plan for the Urban and Rural System for the 2021–2030 Period, with a Vision to 2050.* Hanoi.
- Srisatit, T., Tangsathapornpong, A., & Tanaka, T. (2022). Evaluating sustainable urban development indicators in Bangkok metropolitan region. *Journal of Urban Planning and Development*, 148(1), 04021084. [https://doi.org/10.1061/\(ASCE\)UP.1943-5444.0000722](https://doi.org/10.1061/(ASCE)UP.1943-5444.0000722)
- Standing Committee of the National Assembly. (2002). *Resolution No. 26/2002/UBTVQH15 Amending and Supplementing Certain Articles of Resolution No. 1210/2016/UBTVQH13 Dated May 25, 2016, of the Standing Committee of the National Assembly on Urban Classification.* Retrieved from <https://congbao.chinhphu.vn/noi-dung-van-ban-so-26-2022-ubtvqh15-37998>
- Thanh, H. (2023). *Urban Development in Vietnam – Achievements and Limitations to Be Addressed.* Vietnam Integration Journal, Hanoi. Retrieved from <https://vietnamhoinhap.vn/vi/hashtag/nghien-cuu-phap-luat-7.htm>
- Trang, L. (2023). *What is Urbanization? Urbanization Rates Across Provinces and Cities in Vietnam.* Retrieved from <https://luatvietnam.vn/linh-vuc-khac/do-thi-hoa-la-gi-883-95528-article.html>
- UN DESA (2013). *UN DESA Policy Brief No. 40: An integrated strategy for sustainable cities.* Truy cập tại: https://www.un.org/en/development/desa/policy/publications/policy_briefs/policybrief40.pdf
- UN-Habitat (2022), *SDG 11 Synthesis Report: Tracking Progress Towards Inclusive, Safe, Resilient and Sustainable Cities and Human Settlements, United Nations Human Settlements Programme.* https://unhabitat.org/sites/default/files/2019/05/sdg_11_synthesis_report_web2_0.pdf
- World Bank (2020). *Vietnam's Urbanization at a Crossroads: Embarking on an Efficient, Inclusive, and Resilient Pathway.* World Bank Vietnam. Visit at: <https://documents1.worldbank.org/curated/en/856201604684234125/pdf/Main-Report.pdf>
- Zhao, Y., & Wu, J. (2019). Factors affecting sustainability of smart city services in China. *Government Information Quarterly*, 36(4), 101393. <https://doi.org/10.1016/j.giq.2019.101393>

QUY ĐỊNH BÀI VIẾT GỬI ĐĂNG TRÊN TẠP CHÍ NGUỒN NHÂN LỰC VÀ AN SINH XÃ HỘI CỦA TRƯỜNG ĐẠI HỌC LAO ĐỘNG – XÃ HỘI

I. HÌNH THỨC CỦA BÀI BÁO

- Bài viết bằng tiếng Việt, soạn thảo trên Word, font Times New Roman (Unicode); cỡ chữ 12; trên khổ giấy A4; lề trên, dưới, trái, phải: 2,54 cm; giãn dòng: 1,5 lines. Mật độ chữ bình thường, không được nén hoặc kéo giãn khoảng cách giữa các chữ.
- Nội dung bài viết cô đọng, súc tích, theo cấu trúc của bài báo khoa học; không quá 15 trang đánh máy giấy A4 (bao gồm cả bảng biểu, hình vẽ, chú thích, tài liệu tham khảo).

II. KẾT CẤU VÀ CÁC THÀNH PHẦN NỘI DUNG CỦA BÀI BÁO

- 1. Tên bài báo:** tên bài báo cần phải ngắn gọn (không nên quá 20 chữ/words), rõ ràng và phải phản ánh nội dung chính của bài báo. Tên bài báo phải viết chữ in hoa, cỡ chữ 12, in đậm, căn giữa trang.
- 2. Tên tác giả, cơ quan công tác, địa chỉ email** (Trường hợp có nhiều tác giả cũng nêu đầy đủ).
- 3. Tóm tắt bài viết:** phần tóm tắt bài báo gồm 2 phần tiếng Việt và tiếng Anh. Tóm tắt bằng tiếng Việt có độ dài từ 150 đến 250 từ, phản ánh khái quát những nội dung chính trong bài báo và thể hiện rõ những kết quả, đóng góp, điểm mới của bài báo.
- 4. Từ khóa:** từ khóa là những từ được cho là quan trọng đối với nội dung nghiên cứu đặc trưng cho chủ đề của bài viết đó. Tác giả đưa ra một số từ khóa (khoảng 3 - 6 từ khóa) của bài viết. Từ khóa có cỡ chữ 12, chữ thường, cách mỗi từ là dấu phẩy.
- 5. Nội dung bài báo:** có thể có hình thức khác nhau nhưng đảm bảo các nội dung sau: Giới thiệu; Tổng quan nghiên cứu và hoặc cơ sở lý thuyết; Phương pháp nghiên cứu; Kết quả nghiên cứu (Thực trạng vấn đề nghiên cứu); Kết luận hoặc /và giải pháp/khuyến nghị/hàm ý và Tài liệu tham khảo.

III. CÁC QUY ĐỊNH VỀ KỸ THUẬT TRÌNH BÀY

- 1. Quy định về đánh số đề mục**
Trong phần nội dung chính của bài viết, các đề mục lớn phải là chữ in đậm, căn trái và được đánh số liên tục theo chữ số Ả-rập. Các tiểu mục cấp 1 (ví dụ: 1.1) là chữ in đậm và nghiêng. Các tiểu mục cấp 2 (ví dụ: 1.1.1) là chữ in nghiêng nhưng không in đậm.
- 2. Quy định về trình bày bảng biểu, hình vẽ, ký hiệu, công thức**
Quy định trình bày bảng, hình vẽ
 - Các bảng dữ liệu trình bày trong bài báo được ghi thống nhất là Bảng. Các bảng dữ liệu phải là định dạng bảng (table) trong phần mềm Microsoft Word.
 - Các đồ thị, biểu đồ, sơ đồ trong bài báo được ghi thống nhất là Hình.
 - Các bảng/hình trong bài báo phải được dẫn nguồn.
- 3. Quy định về trình bày trích dẫn, tài liệu tham khảo**
Việc trích dẫn tài liệu tham khảo được thể hiện ở trích dẫn trong bài và tài liệu tham khảo. Tạp chí áp dụng cách trích dẫn kiểu APA.

IV. HÌNH THỨC GỬI BÀI, NHẬN BÀI

- Bài viết gửi về Ban Biên tập theo địa chỉ email: tapchinguonnhanluc@ulsa.edu.vn
- Quy định thể lệ viết bài Tạp chí, tác giả vui lòng xem chi tiết tại website của Trường: <http://ulsa.edu.vn/>

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- Tên bài báo: Khung lý thuyết nghiên cứu vai trò các bên trong giải quyết vấn đề sức khỏe tâm thần của học sinh phổ thông
 - Tác giả: TS. Nguyễn Thị Hoa, Ngô Quỳnh An, Nhâm Diệu Linh, Ngô Vũ Thu Ngân
 - Số 42 – tháng 5/2025
 - Ngày duyệt đăng: 11/04/2025
- Ban biên tập Tạp chí Nguồn nhân lực và An sinh xã hội cải chính thông tin về “Ngày duyệt đăng” của Bài báo trên như sau:
- Ngày duyệt đăng: 07/04/2025

Tổng Biên tập
PGS. TS. Lê Thanh Hà



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