FACTORS AFFECTING TALENT RETENTION IN THE PUBLIC SECTOR: A CASE STUDY OF VIETNAM

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Abstract

The main objective of this study is to analyze the impact of factors on talent retention in the public sector of Vietnam. Talent retention is measured through job satisfaction, work motivation, and loyalty. The data were collected from 335 employees at administration agencies and public nonbusiness units using a questionnaire survey. The data were analyzed with descriptive statistics, and a reliability test, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling were performed. The research results show that job satisfaction, work motivation, and loyalty have a direct impact on talent retention in the public sector of Vietnam. Work motivation has a positive impact on the loyalty of talented public servants. The research results provide much useful information for managers of administration agencies and public nonbusiness units to retain talent, as measured by job satisfaction, work motivation, and the loyalty of public servants.

Keywords: Job satisfaction; Loyalty; Public sector; Talent retention; Vietnam; Work motivation.

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1. INTRODUCTION

Talent retention is currently emerging as an issue for organizations in the modern economy (Sinha & Sinha, 2012). Talented employees play an important role in the success or failure of organizations. If the turnover rate of talent is high, it will have a negative impact on the organization. Thus, organizations need attractive remuneration policies to retain talented employees (Lalitha, 2012).

The public sector plays a significant role in economic growth and development by performing its official duties (Nguyen & Uong, 2021). Therefore, public employees in general and talented employees in the public sector, in particular, play an important role in advancing the socio-economic development of Vietnam. However, public agencies and organizations are faced with job transfers by talented individuals, which diminishes the level of service to residents and the national benefit.

Nguyen and Nguyen (2017) analyzed the factors determining the retention of talented employees in the textile and garment industries in Dong Nai Province, and Vung (2022) analyzed factors impacting employee retention in Vietnamese firms. These previous studies are similar to ours in that they analyzed factors affecting talent retention involving aspects of job satisfaction, organizational commitment, and psychology, but not in the public sector.

This study aims to fill a knowledge gap by assessing factors that impact talent retention in the public sector of Vietnam. From the analyzed outcomes, the study provides policy recommendations to retain talent at public agencies and organizations in Vietnam.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Literature Review

2.1.1. Job satisfaction

Job satisfaction is a factor that receives a lot of attention in organizational behavior studies. Accordingly, researchers have different opinions about job satisfaction. Smith et al. (1969) and Spector (1997) explained job satisfaction as an employee’s liking elements of a job. Locke (1969) and Ellickson and Logsdon (2001) argued that if employees have positive or negative emotions at work, it means they are satisfied or dissatisfied with their job. Thus, job satisfaction is an attitude variable expressing employees’ emotions of happiness, excitement, and comfort with their current job.

Gurney et al. (1997) found that job satisfaction can be measured from two perspectives: general job satisfaction and satisfaction with specific aspects of a job. They also confirmed that the two perspectives are widely used and consistent with organizational behavior studies. Slåtten (2008) showed that when assessing job satisfaction, one must choose one of the two perspectives to be consistent with the research purpose, and he emphasized the importance of overall job satisfaction. We assess
job satisfaction in the public sector from the perspective of overall job satisfaction in this study and in our earlier work (Nguyen & Uong, 2022).

Gabris and Simo (1995) stated that job satisfaction of public and private sector employees share similar characteristics. In contrast, Porter and Mitchell (1967) and Solomon (1986) found that public sector employees feel less satisfaction than private sector employees in terms of respect for their freedom, democratic rights, and self-fulfillment needs.

2.1.2. Work motivation

Motivation is self-effort to achieve a set goal (Bedeian, 1983) and is an individual’s intrinsic motivation to satisfy needs or wants (Spiegel et al., 2004).

Work motivation was explored in very early studies. Maslow (1943) stated that work motivation consists of employees feeling satisfied and necessary. Herzberg et al. (1959), Porter et al. (2003), and Nguyen and Nguyen (2007) emphasized that work motivation is the aspiration and willingness of each employee to increase effort to realize the goals set by the organization, and that it is composed of internal and external motivation. Deci and Ryan (1985) found that internal motivation affects employee behavior, while external motivation contributes to increased internal motivation. Hence, internal and external motivation are key factors of employees’ work motivation.

However, Rainey (1982) found a major difference between work motivation in the public and private sectors. Work motivation in the public sector is the tendency of employees to be willing to meet the minimum requirements of public organizations to improve institutions and organizations (Perry & Wise, 1990). Perry and Hondeghem (2008) and Nguyen (2014) concluded that work motivation in the public sector is the values and employees’ belief to serve society and the community. After all, the key difference between work motivation in the public and private sectors is the will, strong belief, and loyalty to the ideals, goals, and meanings of official duties, wholeheartedly serving the interests of the people and society and respecting the law.

2.1.3. Loyalty

Mowday et al. (1979) and Stum (1999, 2001) defined employee loyalty as the intention to stay in an organization over a long period, even if the employee receives another, more attractive offer. Peloso (2004) agreed with the above view and confirmed that employee loyalty is an emotional attachment to the organization and a habit of often talking about the organization with everyone. Allen and Meyer (1990) stated that employee loyalty is synonymous with organizational commitment because of three psychological attitudes. Employees are loyal because they have affection for the organization, because they perceive that the chance of finding a better job to be low, and because they follow normative standards.
Loyalty Research Center (2004) and Coughlan (2005) stated that employee loyalty is the commitment of employees to a successful organization. The employees perceive working in the organization as the best choice, and they have never thought of finding an alternative job. A public sector job is a form of lifelong employment, so public employees will have higher loyalty than those in the private sector because of the benefits of working in the public sector. Therefore, public sector employee loyalty is a strong belief, consisting of pride in the organization and a willingness to work hard and to dedicate oneself to the common goals and values of the organization.

2.1.4. Talent and Talent Retention

Gagné (2000) found that talented employees who have outstanding abilities and skills complete their work 10% better than their colleagues in the same field. Thorne and Pellant (2007) asserted that talented individuals are ones who are superior to others and that they do not need to use their full capacity to complete a job.

In a literature review, Ulrich et al. (2009) demonstrated that a talented individual is not only a person of excellent ability, but is also one who needs to be closely connected and continuously devoted to the organization. Talented people show strong determination in their work and work hard for the common goal of the organization. Thus, the concepts of good employees and talented employees are specifically distinguished because good employees only meet the necessary conditions rather than enough conditions to become talented employees. At the same time, a person is talented if they possess an unusual aptitude, erudite intellectual ability, or superior mental capacity (Davis et al., 2016).

Nguyen (2010) emphasized that a talented individual is a person with outstanding qualities and the ability to solve a complex problem or to bring about high or very high efficiency, even the highest in that range, in a difficult field of activity. They have high intelligence, broad knowledge, professional skills, and life goals consistent with trends in society. In addition, they are people with strong political bravery and are motivated to live for society. Tran (2015) showed that talented individuals possess two factors: first, innate traits such as intelligence, sharp thinking, good memory, flexible thinking, and quick learning; and second, characteristics learned from family, school, and the social environment, such as knowledge, communication skills, eagerness to learn, sense of responsibility, political bravery, and creativity. The second factor plays an important role in the formation of talented individuals.

Thus, talented individuals have both talent and moral qualities. They have the ability to be creative, to solve problems in all situations, and to motivate people to develop together. In other words, talent is a higher level of high-quality human resources.

Davis et al. (2016) identified four criteria to identify talent: (i) the ability to perform well assigned tasks in any position, (ii) the ability to respond well in all difficult situations, (iii) the ability to learn continuously for life, and (iv) the characteristics of a leader. These four criteria are perfectly suitable to use as a basis for identifying talent in the public sector of Vietnam.
Cheese et al. (2008) stated that talent is a valuable resource that every organization wants to own. Hence, talent retention is more urgent than attracting talent in the competition for talent between organizations because of its scarcity (Singh & Dixit, 2011). Hassan et al. (2011) showed that talent retention is retaining people who have or will have the potential to create success for the organization. Davis et al. (2016) also agreed with the above view, at the same time organizations also must maintain their motivation.

Whether an organization is in the public or the private sector, there is a need to focus on retaining talent. Although the concept of talent retention has not yet been unified, it can be seen that talent retention is the use of measures to entice talented employees to stay in the organization for a long time so they can contribute to the organization.

2.2. Hypothesis development

2.2.1. The relationship between job satisfaction and work motivation

Abraham (2012) and Alarcon and Lyons (2011) argued that job satisfaction plays an important part in creating work motivation. They found that a comfortable and positive psychology will motivate employees to be more enthusiastic about their work because job satisfaction is an emotional state, and work motivation represents a state of purposeful activity. Schaufeli and Bakker (2004) and Biswas and Bhatnagar (2013) found that job satisfaction has a strong impact on work motivation. In other words, the greater the job satisfaction, the greater the motivation to work. Additionally, Vokić and Hernaus (2015) confirmed that job satisfaction is a prerequisite for work motivation. Therefore, the following hypothesis is posited.

H1: Job satisfaction has a positive effect on work motivation.

2.2.2. The relationship between job satisfaction and loyalty

Research by Silvestro (2002) and Turkyilmaz et al. (2011) found that if organizations desire employees to stay for a long time, the organization must create job satisfaction for its employees. If employees do not experience job satisfaction, they will intend to leave the organization and look for another job. Hence, employee loyalty, or lack of loyalty, to an organization is determined by job satisfaction. To put it differently, if an organization increases employee job satisfaction, employees will be more loyal to that organization. Overall, job satisfaction is the foundation of employee loyalty to an organization (Chang et al., 2010). Musa et al. (2012) and Vokić and Hernaus (2015) also found important evidence that job satisfaction is positively correlated with employee loyalty to an organization. Therefore, the following hypothesis is posited.

H2: Job satisfaction has a positive effect on employee loyalty.
2.2.3. The relationship between job satisfaction and talent retention

Westlund and Hannon (2008) showed that employees’ long-term work intention comes from job satisfaction. Job satisfaction will lead to longer working time in the organization (Musa et al., 2012; Tanwar & Prasad, 2016). Doh et al. (2011) found that job satisfaction is an important factor for retaining talent in an organization and emphasized the importance of one in the operation and success of an organization. If talented people have a lot of pride in the organization, they will be more easily satisfied with their jobs and may therefore stay at the organization longer. Nguyen (2020) confirmed that if an organization wants to retain talent, it must find ways to increase job satisfaction. Therefore, job satisfaction has the highest impact on talent retention, and the following hypothesis is posited.

H3: Job satisfaction has a positive effect on talent retention.

2.2.4. The relationship between work motivation and talent retention

Lim et al. (2008) found that if employees do not have work motivation, they will only continue to work at an organization for no longer than an average of three years. Willis-Shattuck et al. (2008) showed that work motivation brought a positive influence on employee retention at the organization. Shah and Asad (2018) and Paredes et al. (2021) also agreed with the above view. Nguyen (2020) pointed out a positive relationship between work motivation and talent retention in Vietnam. Work motivation plays an important role in promoting retention of talented employees to stay at the organization for a long time. Hence, if the organization creates work motivation, talented employees will want to work and contribute to the organization for a long time. The following hypothesis is posited.

H4: Work motivation has a positive effect on talent retention.

2.2.5. The relationship between loyalty and talent retention

Musa et al. (2012) showed that loyalty has a close relationship with employee retention whether or not employees left an organization during its difficult times. Sotubo (2014) stated that loyalty has a positive impact on employee retention; if employees are loyal, they will be reluctant to leave the organization. Chimney (2016) studied loyalty based on two perspectives: employees and the organization. She concluded that employee loyalty affects employee retention in the organization. Nguyen (2020) found that if an organization wants to retain talent, it needs to increase employees’ allegiance. Thus, if talented employees are loyal, they will love their work, put in their best effort, and want to stay at the organization. Additionally, the organization will also be aware of loyalty, recognize the contributions of talented employees, find ways to meet their expectations, and want to retain them for long periods. The following hypothesis is posited.

H5: Loyalty has a positive effect on talent retention.
2.2.6. The relationship between work motivation and loyalty

Alarcon and Lyons (2011) emphasized the overlap between work motivation and loyalty. In contrast, other studies have confirmed a difference between those two factors and pointed out a close link between work motivation and employee loyalty (e.g., Field & Buitendach, 2011; Ibrahim & Falasi, 2014; Schaufeli & Bakker, 2004). Biswas and Bhatnagar (2013) emphasized that work motivation shows trust between the organization and employees and the loyalty of employees to the organization where they work. In simpler terms, work motivation will increase loyalty. Based on theory and practice, Vokić and Hernaus (2015) concluded that work motivation is a prerequisite for employees to develop loyalty to an organization. Therefore, the following hypothesis is posited.

H6: Work motivation has a positive effect on loyalty.

From the hypotheses, the authors suggest the following research model (see Figure 1).

![Figure 1. Research Model](image)

3. RESEARCH METHOD

3.1. Scale design

The scales were designed based on the factors in the research model and the findings of domestic and foreign studies. The scale of job satisfaction includes four proxy variables of Nguyen and Uong (2022). The scale of work motivation contains six proxy variables of Steers and Porter (1983). The scale of loyalty includes three proxy variables of Peloso (2004), and the talent retention scale includes six proxy variables of Nguyen (2020).

The authors used a purposive sampling method to select fifteen managers who have extensive experience at state administration agencies and public nonbusiness units. The managers were asked to carefully appraise the content involving factors and to add or remove unsuitable proxy variables. In addition, in-depth interviews were conducted with five human resource specialists to discover the relationships between the factors, modify the research model, and solve problems discovered during the talk over. The discussion and interview questions were open-ended, exploratory questions to serve as a basis for supplementing and adjusting the indicators in the preliminary scales. The discussions and in-depth interviews were conducted offline and recorded. They were 60
minutes in length. The authors used NVivo 11 software to store, encode, and analyze the qualitative data.

The quantitative research results showed that the managers and specialists absolutely agreed with the elements of the suggested study model. The following recommendations were suggested.

The discussion group members proposed to add three proxy variables to the job satisfaction scale to clarify the job satisfaction characteristics of talented employees working in the public sector.

During the group discussion, members found an observation variable in the work motivation scale that overlapped with the job satisfaction scale and suggested that it be removed to avoid reducing the scale reliability. At the same time, they proposed adding three proxy variables to make the content of the scale more convincing and closer to the reality of talented employees working in the public sector.

The opinion of the experts was that the original loyalty scale was of a general nature and not convincing in highlighting the content of the loyalty of public sector talented employees, and they suggested that a new scale should be developed. Through discussion, synthesis of opinions, and voting, the authors built a loyalty scale consisting of eight proxy variables.

The talent retention scale was criticized by the group of experts as inconsistent with the reality of talent retention in the public sector. Therefore, the experts proposed that a new scale be developed. The opinions of the participants in the discussions and interviews were collected, and the authors built a scale consisting of eight proxy variables.

In addition, the authors altered words to reflect the characteristics of the public sector and the educational background of the respondents. The scale was aggregated and built from the results of in-depth discussions and interviews with experts who conducted preliminary surveys to determine its reliability. Thirty talented individuals were selected for the preliminary survey according to four criteria specified by Davis et al. (2016). The results showed that the factor scale with the corrected items had total correlation values greater than 0.3 and a Cronbach’s alpha over the 0.6 threshold, so the factor scale is highly reliable and suitable for conducting formal research. Table 1 shows the items investigated in this study.

3.2. Sampling and data acquisition

The minimal sample scale for exploratory factor analysis (EFA is a statistical method used to uncover the underlying structure of a relatively large set of variables) is 50, and the optimum is 100 or more (Hair et al., 2010). The proportion of observations to an analytic variable of 5:1 will provide the minimal sample scale to ensure reliability. We used the optimal 10:1 proportion. The model had 32 proxy variables; therefore, the sample scale is $32 \times 10 = 320$. 

67
In case the proportion of responses is low, we chose a sample of 350 talented public servants. Based on the documents of Nguyen and Nguyen (2017) and Do et al. (2020), the survey scale of this study is reasonable. The authors used a simple random sampling method to select public servants and the four criteria of Davis et al. (2016) to identify talented individuals. The authors consulted with senior managers at administrative agencies and public nonbusiness units in five cities: Hanoi, Hai Phong, Da Nang, Ho Chi Minh City, and Can Tho to identify the talented individuals in their organizations. The authors distributed samples equally, with $350/5 = 70$ per city, for a uniform assessment among cities. The investigation time was from May 1 to July 31, 2022. The questionnaires were sent by email to talented public servants working at administrative agencies and public nonbusiness units.

After processing the data, the authors received 335 valid survey responses for a recovery proportion of 95.71%. Male respondents accounted for 66.2% of the total. Most respondents (82.5%) were more than 35 years old (middle-aged), 100% had higher education, and 86% were married. The high percentage of higher education is not difficult to understand because the education level of public servants is graduate and post-graduate (Nguyen & Uong, 2021).

4. **RESEARCH RESULTS AND DISCUSSION**

4.1. **The reliability, validity, and discriminant validity tests of the constructs in the research model**

Table 1 shows that the four scales possess internal consistency because the Cronbach’s alpha values exceed 0.7 (Nunnally & Bernstein, 1994). The factor loading values are accepted because they exceed the required threshold of 0.5 (Hair et al., 1998). The composite reliability (CR) values exceed 0.7 and the average variance extracted (AVE) values exceed 0.5. Thus, the scales meet the reliability and convergent validity requirements (Fornell & Larcker, 1981) and are suitable for the analysis.

**Table 1. Reliability and convergent validity of the scale**

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Item</th>
<th>Factor loading</th>
<th>Cronbach’s alpha</th>
<th>Composite reliability</th>
<th>Average variance extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS1</td>
<td>I like my job</td>
<td>0.898</td>
<td>0.844</td>
<td>0.835</td>
<td>0.813</td>
</tr>
<tr>
<td>JS2</td>
<td>I found a suitable job</td>
<td>0.894</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS3</td>
<td>My job is very interesting</td>
<td>0.882</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS4</td>
<td>I am satisfied when working at the agency</td>
<td>0.871</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS5</td>
<td>I get excited when I start work every day</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS6</td>
<td>I believe my job is the best choice</td>
<td>0.855</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS7</td>
<td>I am satisfied because it is a stable job</td>
<td>0.847</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS8</td>
<td>I show my ability at work</td>
<td>0.838</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1. Reliability and convergent validity of the scale (cont.)

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Item</th>
<th>Factor loading</th>
<th>Cronbach’s alpha</th>
<th>Composite reliability</th>
<th>Average variance extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>WM1</td>
<td>I try to do my best to complete the work</td>
<td>0.896</td>
<td>0.84</td>
<td>0.864</td>
<td>0.809</td>
</tr>
<tr>
<td>WM2</td>
<td>I work for the organization’s common goal</td>
<td>0.891</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WM3</td>
<td>I think about work even when I’m at home</td>
<td>0.883</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WM4</td>
<td>I don’t make any mistakes in my work</td>
<td>0.878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WM5</td>
<td>I am willing to go early and stay late</td>
<td>0.865</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WM6</td>
<td>I want to be a role model</td>
<td>0.861</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WM7</td>
<td>I work with a relaxed mentality</td>
<td>0.853</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WM8</td>
<td>I work hard to serve the people and society</td>
<td>0.851</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L1</td>
<td>I will work at the agency until I retire</td>
<td>0.893</td>
<td>0.833</td>
<td>0.824</td>
<td>0.783</td>
</tr>
<tr>
<td>L2</td>
<td>I am proud of the agency</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L3</td>
<td>I am willing to sacrifice personal interests</td>
<td>0.875</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L4</td>
<td>I am loyal to the Party, the Fatherland, and the people</td>
<td>0.866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L5</td>
<td>I will stay at the agency for a long time</td>
<td>0.857</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L6</td>
<td>I must have responsibilities and obligations to the agency</td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L7</td>
<td>I am proud to be an employee of the agency</td>
<td>0.846</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L8</td>
<td>I volunteer at the agency</td>
<td>0.831</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR1</td>
<td>I find myself valuable</td>
<td>0.888</td>
<td>0.837</td>
<td>0.87</td>
<td>0.798</td>
</tr>
<tr>
<td>TR2</td>
<td>The agency recognizes my contributions</td>
<td>0.869</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR3</td>
<td>The agency creates conditions for me to advance at work</td>
<td>0.804</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR4</td>
<td>The agency cares about spiritual life</td>
<td>0.789</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR5</td>
<td>The agency creates the best working environment</td>
<td>0.783</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR6</td>
<td>I never intended to leave the agency</td>
<td>0.732</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR7</td>
<td>I am respected at work</td>
<td>0.715</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR8</td>
<td>The agency met all the requirements</td>
<td>0.707</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Previous studies used the Fornell-Lacker criterion to assess discriminant validity. However, using simulation studies, Henseler et al. (2015) demonstrated that discriminant
validity is better measured by the heterotrait-monotrait (HTMT) ratio, which they developed. Therefore, we used the HTMT ratio to evaluate the discriminant validity of the scales. The HTMT ratio of scale pairs must be below 0.85 to achieve discriminant validity. Table 2 shows that all HTMT ratios are lower than 0.85, thereby confirming discriminant validity.

**Table 2. Heterotrait-Monotrait ratio (HTMT)**

<table>
<thead>
<tr>
<th></th>
<th>Job satisfaction</th>
<th>Work motivation</th>
<th>Loyalty</th>
<th>Talent retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work motivation</td>
<td>0.324</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.333</td>
<td>0.314</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent retention</td>
<td>0.396</td>
<td>0.038</td>
<td>0.343</td>
<td></td>
</tr>
</tbody>
</table>

### 4.2. Structural equation modeling

The confirmatory factor analysis shows that the ratio of the model’s Chi-square value to its degrees of freedom (Chi-square/df) is 2.405. Because the indicator is below 3, the model is confirmed as a good model showing a good fit (Hair et al., 1998). The goodness-of-fit index (GFI) = 0.901, the Tucker-Lewis index (TLI) = 0.905 and the comparative fit index (CFI) = 0.907 are in good compliance since they exceed 0.9 (Chin & Todd, 1995). The Root mean square errors of approximation (RMSEA) value (0.050) is below 0.06, indicating a good fit (Taylor et al., 1993). Thus, the research model is considered to be a good fit (see Figure 2).

![Figure 2. Confirmatory factor analysis results for the full measurement model](image-url)
The analysis outcomes show that chi-square/df = 2.543 < 3.0 (Hair et al., 1998). The GFI = 0.903, the CFI = 0.912 and the TLI = 0.908 are more than 0.9 (Chin & Todd, 1995), and the RMSEA = 0.054 < 0.08 (Taylor et al., 1993). Therefore, the research model is considered to be a good fit (see Figure 3).

Moreover, the analysis outcomes also showed that the probability value of the relationships between the factors is at least 0.05. Hence, the relationship between constructs in the study model is statistically significance in the structural equation model (SEM) (Cohen, 1988). Table 4 summarizes the SEM results.

### Table 3. Hypothesis test results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesized direction</th>
<th>Path coefficient</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Job satisfaction → Work motivation</td>
<td>+</td>
<td>0.342**</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: Job satisfaction → Loyalty</td>
<td>+</td>
<td>0.345**</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: Job satisfaction → Talent retention</td>
<td>+</td>
<td>0.322*</td>
<td>Supported</td>
</tr>
<tr>
<td>H4: Work motivation → Talent retention</td>
<td>+</td>
<td>0.340**</td>
<td>Supported</td>
</tr>
<tr>
<td>H5: Loyalty → Talent retention</td>
<td>+</td>
<td>0.352**</td>
<td>Supported</td>
</tr>
<tr>
<td>H6: Work motivation → Loyalty</td>
<td>+</td>
<td>0.305**</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Notes: * indicate that the path coefficient are significance at 0.1; ** indicate that the path coefficient are significance at 0.05.

### 4.3. Discussion

The main objective of this study is to account more clearly for the direct impact of job satisfaction, work motivation, and loyalty on talent retention at the administration agencies and public nonbusiness units in five Vietnamese cities.
The research outcomes show the research model to be a good fit, and the hypotheses are accepted in this study. The outcomes are of practical significance for managers of administration agencies and public nonbusiness units in five cities, talented public servants, and scholars studying human resource management in the public sector.

The results in Table 4 indicate that job satisfaction has a significant effect on work motivation, loyalty, and talent retention. Job satisfaction has the highest positive effect on loyalty with 0.05 significance and a standardized estimate of 0.345. Additionally, work motivation and loyalty have a positive impact on talent retention, with standardized estimates of 0.340 and 0.352. Work motivation has a positive impact on the loyalty of talented public servants at the administration agencies and public nonbusiness units, with a standardized estimate of 0.305. In other words, if talented public servants have work motivation, they will be loyal and stay in the organization for a long time. Accordingly, the research results are consistent with the studies of Biswas and Bhatnagar (2013), Vokić and Hernaus (2015), Doh et al. (2011), Nguyen (2020), and Musa et al. (2012). Thus, the hypotheses H1, H2, H3, H4, H5, and H6 are accepted.

Overall, job satisfaction, work motivation, and loyalty have a direct impact on the retention of talented public servants. That is the major difference compared with the studies of Nguyen and Nguyen (2017) and Vung (2022), since those studies did not evaluate talented public servant retention based on job satisfaction, work motivation, and loyalty. Thus, this research can provide a pattern for later studies to measure talent retention in the public sector.

5. POLICY IMPLICATIONS

This research contributes several theoretical and practical implications. To begin with the theoretical implication, by assessing factors affecting talent retention, this research is a considerable addition to the organizational behavior literature.

Next is the practical implication. This study is the first to discover factors affecting talented public servant retention at administration agencies and public nonbusiness units in five Vietnamese cities. Therefore, this study provides much helpful information for managers of the administration agencies and public nonbusiness units to retain talent, as measured through job satisfaction, work motivation, and loyalty of public servants, as follows.

Firstly, job satisfaction is the key to retaining talent ($\beta = 0.322$). Hence, managers need to develop a fair job evaluation policy. Additionally, the agencies need to create a cohesive relationship between managers, employees, and talented individuals as well as create a comfortable working environment. In particular, managers need to focus on development and promotion policies for talented employees.

Secondly, work motivation has an important impact on talent retention ($\beta = 0.340$). Therefore, managers need to create excitement in the workplace for talented employees by recognizing work results and encouraging employees with financial and nonfinancial policies.
Thirdly, loyalty is a major factor impacting talent retention ($\beta = 0.352$). Managers need to create a responsible and flexible working environment by creating trust among talented individuals in the organization. Moreover, managers need to create conditions for talented people to have real affection for the agency. If there is genuine love, talent will not leave the agency.

6. CONCLUSION

The study has built a model to measure talent retention based on job satisfaction, work motivation, and loyalty. The data were obtained by a direct investigation of talented public servants working at administration agencies and public nonbusiness units in five cities. The research carried out CFA and SEM analysis to confirm the impact of the constructs in the study model on talent retention. The results showed job satisfaction, work motivation, and loyalty to have a direct effect on talent retention of public servants working at administration agencies and public nonbusiness units.

Although the study has achieved the original purpose of assessing factors affecting talent retention of public servants, there are still some limitations. Firstly, the study only surveyed five cities, so the generalizability of the study may be limited. The study results may not be representative of other regions in Vietnam with different characteristics. Secondly, this study was carried out over a short period, so its representativeness may also be limited. Hence, further studies should be conducted in different areas and times to obtain an overview of the impact of these factors on talent retention.

REFERENCES


Chang, L.-C., Shih, C.-H., & Lin, S.-M. (2010). The mediating role of psychological empowerment on job satisfaction and organizational commitment for school...
Nguyen Danh Nam and Uong Thi Ngoc Lan


77


