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Impact of Work Motivation on Satisfaction and Turnover of Public Universities Lecturers*

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Abstract

The paper aims to examine the relationship between various types of motivation and satisfaction as well as turnover intentions of public university lecturers. Intrinsic motivation is found to affect both satisfaction and turnover, while for extrinsic motivation, only one type has a significant effect on satisfaction. The web-based questionnaire with convenience sampling was chosen to approach target respondents. Data was collected by sending a link of the questionnaire to the lecturers' email. There were 700 questionnaires collected. Of which 681 valid responses, after screening out unusual questionnaires. In order to fulfill these aims, the authors employed structural equation modeling with maximum likelihood method supported by AMOS software with 681 valid samples. The evidence confirms the high correlation between intrinsic motivation and satisfaction for university lecturers which has been shown in previous studies. With regard to extrinsic motivation, extrinsic regulation (material) is found to have a positive influence on satisfaction, meaning financial rewards and job security will lead to his contentment while introjected regulation is a source of dissatisfaction. The results also demonstrate that intrinsic motivation is negatively correlated with turnover intentions. A person who is interested in the job itself is less likely to leave his or her job due to a keen passion for it.

Keywords: Intrinsic Motivation, Extrinsic Motivation, Satisfaction, Turnover, Public University, Vietnam

JEL Classification Code: C54, I23, J24, J28, M54

1. Introduction

Motivation is certainly one of the most important concepts in psychology and human resource management (HRM) research (Rahaman et al., 2020). Many studies have shown that motivation is related to various outcomes

such as job performance, commitment, job effort, turnover intentions (Gagne et al., 2015). In light of the low ranking and work output that are frequently seen in many universities in developing countries, such as Vietnam, one can understand the interest of researchers and managers for motivation in higher education settings.

Attempts have been made to better understand motivation, most noticeable of which is the self-motivation theory which posits that behavior can be intrinsically motivated, extrinsically motivated or amotivated (Deci & Ryan, 1985, 1991). While it is generally agreed that intrinsic motivation leads to satisfaction and retention (Lawler & Hall, 1970; DeWitte & Buitendach, 2005), the role of extrinsic motivation has been more controversial.

Research into job motivation, satisfaction and turnover in the context of higher education employees remained relatively limited. The motivation of academic staff in universities is said to be different to that of the school teachers. For example, while school teachers choose their job because of the desire to teach, their university counterparts are more attached to and evaluated for their research activities, which require more autonomy and self determination at work.

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This difference calls for further research to investigate the work behavior of academic employees in universities.

Vietnam's higher education system can be classified into two main types: public and private universities (Higher Education Law in Vietnam, 2012), with different policies and management mechanisms for their employees. While private universities' policies are developed by the owners, the management system of public universities strictly obeys the rules set by the government. Generally, there is a preference for public over private universities among students and their families, with private institutions having lower admission standards (Huong & Fry, 2012). Financial factors aside (i.e. public universities are sponsored by the government and have significantly lower tuition fees), parents and students believe that public universities have higher teaching quality and employability.

Like in many other East Asian countries, teaching is a respected profession in Vietnam. After long centuries of being dominated by the Chinese culture, Vietnam has been strongly influenced by Confucianism (Vu & Marginson, 2014) which has continued to this day (Le & Sloper, 1995). Confucianism favors an authoritative role for teachers in the process of transferring knowledge to learners (Tran et al., 2014), placing an emphasis on the importance of teachers in determining learners' success (Huong & Hall, 2016). This, in fact, shows the public's high expectations for teachers, thus creating massive invisible responsibilities and pressure for them.

For lecturers working in public universities, their jobs tend to be more demanding than those of teachers working in other levels of the education system. Doctoral or Master's degree holders from prestigious local universities or foreign universities are qualified and recruited to be university lecturers with two main tasks, teaching and research (Vietnam's Law on Higher Education, 2012). Recently, as part of the government's effort to improve the quality of Vietnam's higher education, academic staff have been required to publish papers in prestigious journals in Vietnam and the world annually, albeit with limited (both financial and academic) resources in hand. In fact, the top 50 higher educational institutions with the highest quality papers in Vietnam are mostly public. The increasingly demanding requirements generally do not correspond with remuneration and other financial incentives. Teaching staff's starting salaries (2400 US dollars) are lower than the country's GDP per capita income of USD 2715.3 (World Bank, 2019). This leads to the fact that many of them have to take extra jobs to increase their income (Hamano, 2008) rather than advance themselves as professional lecturers and researchers. This perhaps is one of the reasons for the low level of performance of Vietnam's research and teaching performance (Anh & Hayden, 2017).

Keeping employees motivated and satisfied is certainly crucial to any organization. This paper, therefore, aims to identify the sources of motivation that are important for the satisfaction and retention of lecturers in public universities so as to improve the work performance in these universities.

2. Literature Review

2.1. Work Motivation

For many service businesses, having a motivated workforce is one of the key objectives of their human resource management (HRM) activities since research into motivation has confirmed its impacts on employee attitude and behavior as well as job performance (Björklund, 2001; Grant et al., 2011; Wolor et al., 2020). Motivation, with a range of influences on human behavior, has been central to psychology and human resource research; however, a consensus in academics and practitioners' understanding of motivation remains elusive given the complexity of the concept (Dörnyei & Ushioda, 2011; Meyer et al., 2014).

Pinder (1998) provided one of the most cited definitions of work motivation: "a set of energetic forces that originates both within as well as beyond an individual's being, to initiate work-related behavior, and to determine its form, direction, intensity, and duration" (p.11). According to this view, motivation (1) is what prompts action in employees; (2) can come from both external and internal sources; (3) controls what behavior employees engage in, how, how hard and how long they do it. Many subsequent studies shared the same approach (Heckhausen & Heckhausen, 2008).

While work motivation has seen a proliferation in research in many different fields, motivation for lecturers working in universities seems to receive less coverage (Visser- Björklund et al., 2012). The few existing studies seem to agree on the relationship between self-determined, intrinsic motivation and positive teaching behavior (Esdar et al., 2015).

2.2. Self-Determination Theory: Types of Motivation

Self-determination theory (Deci & Ryan, 2008), a theory initially developed in the 1970s outside the work context, has garnered increasing attention from human resource scholars who seek better understanding of work motivation (Meyer et al., 2004). The theory investigated the degree to which a person's behavior is self-motivated and self-determined, differentiating between intrinsic and extrinsic motivation and suggesting the dominant role of the former (Deci & Ryan, 2011).

Intrinsic motivation derives from the interest and enjoyment in doing an activity, whereas extrinsic motivation involves instrumentalities, one doing it for the instrumental value to which the activity leads (Porter & Lawler, 1968; Deci & Ryan 1991). Depending on the level of internalization of such externally regulated activities, extrinsic motivation can be categorized into 4 subtypes: external regulation, introjected regulation, identified regulation and integrated regulation. Motivation exists along an internalization continuum, ranging from amotivation to passive compliance to active personal commitment (Ryan & Deci, 2000). As the theory suggests, higher levels of internalization are associated with greater persistence and engagement.

Amotivation is a state of unwillingness to engage in a behavior. External regulation involves doing an activity as a result of anticipated reward or punishment from others. Introjected regulation involved self-imposed pressures to avoid guilt, worry and shame or maintain self-esteem. Identification exists when an individual has personally identified with the importance of an action and believed it helps them achieve a personally valued outcome. Integration concerns the adoption of identified regulation so that what one does is fully congruent with his/her sense of self.

In later works, Deci and Ryan (2011) regrouped motivations into autonomous and controlled motivation, illustrating rationale for engaging in tasks. The former, motivation that reflect personal interests and values (Koestner et al. 2008), can come from an individual's intrinsic interest, identified and integrated regulation. Controlled motivation comes from the remaining extrinsic sources.

According to Ryan and Deci (2008), people who are driven by autonomous motivation tend to feel self-directed and more independent, have a greater level of satisfaction and thus are more likely to persist with their behavior. In contrast, those driven by controlled motivation feel external pressure to behave in a certain way. They engage in tasks for externally referenced reasons and are less likely to be self-regulated. Determination tends to desist when reinforcing factors are no longer present.

2.3. Satisfaction

As people spend a large part of their adult lives working, understanding the factors that lead to job satisfaction has a crucial part to play in improving the physical and mental wellbeing of a company's workforce. Job satisfaction refers to the level of contentedness with one's job regardless of whether or not they like the job or its individual aspects (Spector, 1997). Job satisfaction can be measured in cognitive/evaluative, affective/emotional, and behavioral components (Hulin & Judge, 2003; Agho et al., 1993; Hirschfield, 2000).

Thompson and Phua (2012) argued that job satisfaction is concerned with the internal state of gratification or discontentment about the job. This may come from the positive and negative experiences with different aspects of the job such as supervisors, colleagues, salary and the job itself. Many other scholars maintained that satisfaction involves a process of evaluation to determine whether the job fulfill their needs, values, beliefs or expectations (Buitendach & De Witte, 2005; Astuti et al., 2020), leading people to enjoy being at their jobs, doing their work and being rewarded for their efforts (Hirschfield, 2000). This study adopts a comprehensive definition by Locke (1976) which regards job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1304).

Job satisfaction has been widely agreed to be multidimensional and influenced by various personal and situational factors (Bruce & Blackburn, 1992). Fu et al. (2011) suggested various elements of job satisfaction including pay, coworker, supervision and work itself. Herzberg (1966) in his Two-factor theory argued that satisfaction and dissatisfaction were two distinct constructs engendered by different job components. Intrinsic job content factors (motivators) such as recognition, autonomy or accomplishment lead to satisfaction while extrinsic context factors (hygiene) such as pay, working conditions often cause dissatisfaction. Similarly, Volkwein et al. (1998) identified different aspects of satisfaction: intrinsic (factors such as autonomy, creativity, accomplishment), extrinsic (salary, benefits, career prospects), interpersonal (relationships with others), and work condition-related satisfaction.

According to Oshagbemi (1996), despite the fact that changes in the education system have had considerable impacts on job satisfaction, there is a scarcity of research to investigate satisfaction among teachers of all levels of education, from primary schools to universities. There are, also, distinctive differences in satisfaction with regard to different aspects of their jobs, namely teaching, research and job context factors such as management, salary, benefits, supervision, relationships with colleagues. This requires further research to understand the factors that lead to satisfaction.

2.4. Turnover Intention

Turnover has long been considered an indicator of the effectiveness of HRM due to the high cost associated with recruiting and training new employees. When there is a vacancy, work productivity also declines. In the context of education, it has been suggested that higher teacher turnover reduces school performance (Meier & Hicklin, 2008).

Despite the fact that managers seem to be more interested in turnover than in turnover intentions and that practices to decrease intentions may not have the same impact on turnover (Cho & Lewis, 2012), many studies show that turnover intentions (i.e. the desire to quit) are the most powerful predictor of turnover behavior (Griffeth et al., 2000).

3. Hypothesis Development

3.1. Amotivation and Satisfaction

It is important to realize that job motivation does not always exist as a result of social demands and roles that require employees to take responsibility and uninteresting tasks. To fully understand human behavior, amotivation has been proposed. One may not intend to engage in an activity when experiencing feelings of incompetence or uncontrollability (Ryan & Deci, 2000). This person, therefore, has low levels of satisfaction and may even decide to stop participating in job-related activities, thus:

H1a: Amotivation has a significant, negative impact on satisfaction

H1b: Amotivation has a significant, positive impact on turnover intentions.

3.2. Intrinsic Motivation and Satisfaction

An intrinsically motivated person engages in an activity because it is consistent with their intrinsic goals, allowing the person to feel a greater sense of choice, autonomy, competence and satisfaction. For this reason, the person is more likely to persist with the behavior. It is therefore hypothesized that:

H2a: Intrinsic motivation has a significant, positive impact on satisfaction.

H2b: Intrinsic motivation has a significant, negative impact on satisfaction.

H3a: Identified motivation has a significant, positive impact on Satisfaction for work.

H3b: Identified regulation has a significant, negative impact on Turnover intentions.

3.3. Extrinsic Motivation and Satisfaction

There is a lack of consensus as regards the role of extrinsic motivation in creating satisfaction. Herzberg (1966) claimed that the provision of intrinsic factors such as recognition or achievement led to satisfaction; however, the provision of extrinsic factors such as improved working conditions only avoid dissatisfaction rather than generate satisfaction. However, more recent studies in organizational

behavior suggest that extrinsic motivation has an impact on various job-related aspects including commitment, job satisfaction and turnover intentions (Wegge et al., 2006; Hoole & Vermeulen, 2003). It is hypothesized that:

H4a: Extrinsic regulation (social) has a positive, significant impact on Satisfaction for work.

H4b: Extrinsic regulation (social) has a negative, significant impact on turnover intentions.

H5a: Extrinsic regulation (material) has a positive, significant impact on Satisfaction for work.

H5b: Extrinsic regulation (material) has a negative, significant impact on Turnover intentions.

H6a: Introjected regulation has a positive, significant impact on satisfaction for work.

H6b: Introjected regulation has a negative, significant impact on turnover intentions.

3.4. Job Satisfaction and Turnover Intentions

Job satisfaction is a positive emotional state one has when his values or personal characteristics are fulfilled by the job (Astuti et al., 2020). Many studies have confirmed a strong link between satisfaction and job-related organizational behaviors such as productivity, absenteeism and turnover. Satisfied employees have been shown to be more committed, engage more, and be more effective. When experiencing a high level of contentment, they are less likely to leave the organization (Agarwal & Ferratt, 2001). It is hypothesized that for academic staff in public universities:

H7: Satisfaction has a positive, significant impact on turnover intentions.

4. Research Methodology

4.1. Measurement Development

This study used a self-completed questionnaire with 8 constructs manifested in 35 items to collect quantitative primary data. The items for measuring Amotivation (AMOS), Identified regulation (EMI), Extrinsic regulation social (EMS), Introjected regulation (EMJ) and Extrinsic regulation material (EMM) were originally derived from the scales of Gagne et al. (2015). The scale for measuring Intrinsic motivation (ITM) was employed from Kuvaas et al., (2017). For measuring Satisfaction for work, this study recruited the scale from Oshagbemi, (1999). The measuring scale of Turnover intentions was adopted from Dysvik et al. (2008).

Participants were asked to answer the degree of agreement about each statement of constructs on a five-point Likert-type scale, ranging from strongly disagree to strongly

agree. To prevent misunderstanding from participants, after translating the questionnaire from English to Vietnamese language, it was reassessed by two academic experts in the field of Human resources. Basing on their advice, some ambiguous words were modified to present clearer meaning and to improve the quality of the questionnaire.

4.2. Data Collection

The web-based questionnaire with convenience sampling was chosen to approach target respondents. Although this technique might create biases, in this study’s case, it is able to meet the large number of target respondents with a low cost of time. Thus, it was suitable for this research. Moreover, the use of the questionnaire was appropriate as it is designed for explanatory research to examine the mathematical relationship between variables (Saunders et al., 2016) which is this study’s objectives. Furthermore, this method enables the study which has some restrictions such as time and geographical limitations, likes this study, to be conducted (Fricker & Schonlau, 2002; Kaplowitz, 2004; Fan & Yan, 2010; Barrios et al., 2011). However, as a web-based questionnaire often has a low response rate (Mertler, 2003; Manfreda et al., 2008), some souvenir gifts were employed to give randomly to the lecturers to enhance the response rate. Data was collected by sending a link of the questionnaire to the lecturers’ email.

There were 700 questionnaires collected, of which 681 valid responses. After screening out unusual questionnaires. Table 1 illustrated that the majority of participants were male lecturers that accounted for 53%. Furthermore, the number of participants with the age group of 36–45 accounted for the greatest proportion with the percentage of 39.9%, while the smallest at 1.3% were for the age group of below 24. In terms of education levels, the vast majority (88%) hold Master’s degrees and Doctoral degrees. Finally, in terms of working experience, 30.8% of respondents had 6 to 10 years of working for the current university, 30.2% had 11–15 years, and 25.4% had over 16 years.

5. Data Analysis

5.1. Scale Assessment

The data analysis of this study used IBM SPSS Statistical Package and AMOS software. The descriptive statistics analysis was initially taken by using SPSS to gain the general information about the demographics of the participants and the scales’ scores. Then, the two-step modelling approach (Anderson & Gerbing, 1988) was performed to employ structural equation modeling (SEM) with maximum likelihood method supported by AMOS software.

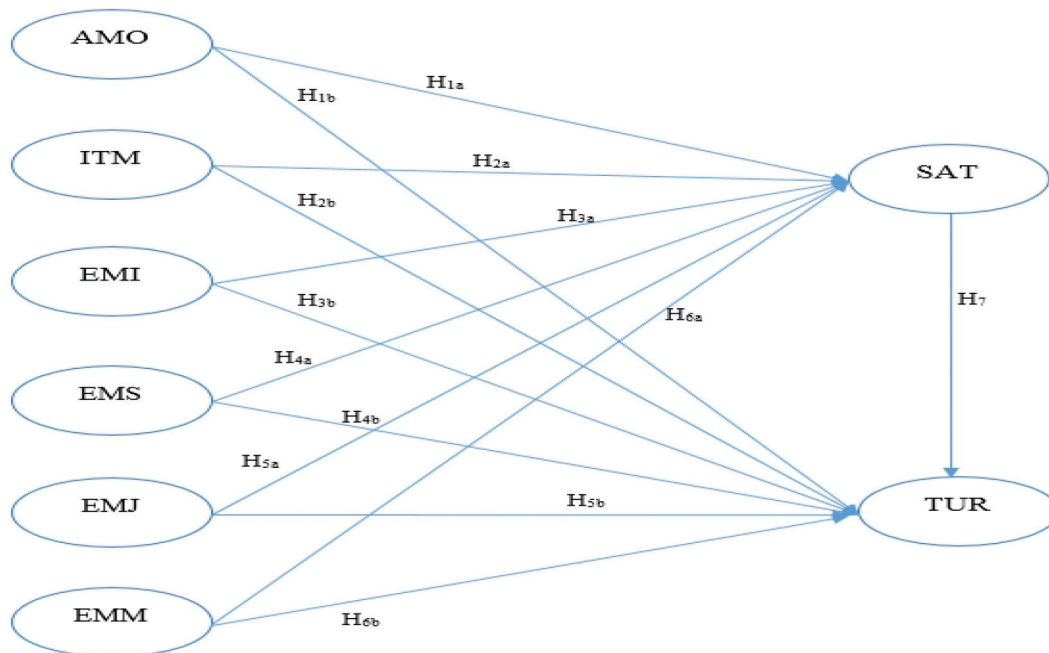


Figure 1: Proposed model

Table 1: Participants' statistic demographics

Items	Frequency	Percent (%)	Cumulative (%)
Gender			
Male	320	53	53
Female	361	47	100
Age			
Below 24	9	1.3	1.3
25–35	244	35.8	37.2
36–45	272	39.9	77.1
46–55	101	14.8	91.9
56–60	43	6.3	98.2
Over 60	12	1.8	100.0
Education level			
Bachelor degree	11	1.6	1.6
Master degree	405	59.5	61.1
Doctor degree	194	28.5	89.6
Doctor of Science	26	3.8	93.4
Associate Professor	43	6.3	99.7
Professor	2	0.3	100
Working experience			
1–5 years	92	13.5	13.5
6–10 years	210	30.8	44.3
11–15 years	206	30.2	74.6
Over 16 years	173	25.4	100

Table 2: Cronbach's alpha, corporate reliability and average variance extracted

Constructs	Cronbach's Alpha	Composite Reliability	AVE
SAT	0.913	0.918	0.656
ITM	0.895	0.895	0.588
TUR	0.902	0.898	0.640
EMI	0.927	0.928	0.811
AMO	0.917	0.918	0.789
EMS	0.886	0.887	0.724
EMJ	0.868	0.863	0.618
EMM	0.786	0.796	0.568

Table 3: Correlations matrix

	SAT	ITM	TUR	EMI	AMO	EMS	EMJ	EMM
SAT	0.810							
ITM	0.303***	0.767						
TUR	-0.360***	-0.329***	0.800					
EMI	0.096*	0.307***	-0.058	0.900				
AMO	-0.135**	-0.165***	0.397***	-0.085*	0.888			
EMS	0.055	0.052	0.010	0.417***	-0.017	0.851		
EMJ	0.163***	0.623***	-0.155***	0.312***	-0.104*	0.132**	0.786	
EMM	0.243***	0.287***	-0.041	0.144**	0.071	0.239***	0.471***	0.754

Note: the black boldface are the square root of AVE.

After taking descriptive statistics, the next step was to test the scales, referring to the combination of items used to measure each construct. The measurement model was evaluated by using reliability and validity to ensure the significant scales for collecting data. Firstly, in order to assess the reliability of scales of all constructs, Cronbach's alpha was chosen. As can be seen in Table 2, the Cronbach's alpha and composite reliability for all constructs' scales ranged from 0.786 to 0.928 which exceed the threshold of 0.7 recommended by Fornell and Larcker (1981). This presented that all the measurement scales for all constructs in this study achieved high reliability which refers to the high consistency within items in each construct. This enables the collection of precise and significant data (Pallant, 2013; Field, 2005). Secondly, factors with loading under 0.6 were removed. For that, SAT5 and SAT8 were deleted as they did not meet the criteria. Then, convergent validity was assessed by using composite reliability and average variance extracted (AVE) (Fornell & Larcker, 1981). As illustrated in table 2, the Average Variance Extracted (AVE) all constructs above 0.5. Hence, the measurement scales of this study obtained convergent validity (Hair et al., 2010; Fornell & Larcker, 1981). Discriminant validity is achieved if the square root of AVE of each construct is bigger than the correlation coefficients between that construct and other constructs (Hair et al., 2010; Fornell & Larcker, 1981). It is clearly shown that all the value of correlation coefficients between constructs were lower than the square root of AVE of each construct (Table 3). Therefore, it could be stated that the measurements scales of all constructs of this research achieved the discriminant validity.

To summarize, after the process of assessing the measurement scales of this study, it is illustrated that the measurement scales obtained reliability, convergent and discriminant validity.

5.2. The Evaluation of Model Fit

After the reliability and validity of the measurement model were checked, the next step was to assess the model fit to examine how well the model fit the data collected (Barret, 2006). The assessment of model fit is based on the indices of three categories of model fit namely: Absolute Fit, Incremental Fit and Parsimonious (Hooper et al., 2008). Although there are many indices for each category to evaluate the model fit, the use of four or more than four indices for all three categories is considered significant testimony of model fit (Hair et al., 2010). Therefore, the use of four indices to test model fit in this study was considered sufficient. Specifically, Chi-square and Root mean square error of Approximation (RMSEA) for Absolute Fit, Comparative fit index (CFI) and Normed fit index (NFI) for Incremental fit and the Parsimony Goodness-of-Fit Index (PGFI) for Parsimony fit.

In order to achieve model fit, the value of Chi-square (should range from 0.5 (Wheaton et al., 1977) to below 5 (Hair et al., 2010), the value of RMSEA should be below 0.08 (MacCallum et al., 1996), the value of NFI should be equal or over 0.9 (Bentler & Bonnet, 1980), and CFI should be equal or over 0.9 (Hu & Bentler, 1999). With regard to PGFI, while other indices have the threshold values to compare, there are no threshold levels for this index (Hooper et al., 2008). However et al. (1989) recommended the value of this index should be over 0.5.

Table 4 indicates that all the indices meet the requirements. Hence, it could be considered that the measurement model achieved the acceptable level of model fit.

Table 4: The Fit Indices of Measurement Model

Fit indices	Value
Chi-square/ degree of freedom ($0.5 \leq 5$)	3.04
Root mean square error of approximation (RMSEA) (≤ 0.08)	0.055
Normed fit index (NFI) (≥ 0.9)	0.913
Comparative fit index (CFI) (≥ 0.90)	0.940
Parsimony Goodness-of-Fit Index (PGFI) ≥ 0.5	0.728

Table 5: The result of hypotheses testing

Hypotheses/Path		Path Coefficient (β)	P-value	Testing result
H _{1a}	Amotivation → Satisfaction for work	-0.115	0.004	Support
H _{1b}	Amotivation → Turnover intentions	0.326	-	Support
H _{2a}	Intrinsic motivation → Satisfaction for work	0.311	-	Support
H _{2b}	Intrinsic motivation → Turnover intentions	-0.249	-	Support
H _{3a}	Identified regulation → Satisfaction for work	0.004	0.924	Non-significant
H _{3b}	Identified regulation → Turnover intentions	0.051	0.250	Non-significant
H _{4a}	Extrinsic regulation social → Satisfaction for work	0.000	0.997	Non-significant
H _{4b}	Extrinsic regulation social → Turnover intentions	0.006	0.893	Non-significant
H _{5a}	Introjected regulation → Satisfaction for work	-0.153	0.012	Support
H _{5b}	Introjected regulation → Turnover intentions	0.040	0.250	Non-significant
H _{6a}	Extrinsic regulation material → Satisfaction for work	0.233	-	Support
H _{6b}	Extrinsic regulation material → Turnover intentions	0.044	0.371	Non-significant
H ₇	Satisfaction for work → Turnover intentions	-0.263	-	Support

Note: P-value = *** means that P-value <0.001.

5.3. The Result of Testing Hypotheses

After the assessment of reliability, the validity of measurement scales and model fit, the structural model was developed and used to test hypotheses. The path analysis was employed to examine the causal relationship between variables proposed in the model of this study.

The testing result in table 5 illustrated that Amotivation had a significant and negative influence on the Satisfaction for work ($\beta = -0.115$, P -value = 0.004) and had a significant and positive influence on Turnover intentions ($\beta = 0.326$, P -value = ***). These results supported hypotheses H_{1a}, H_{1b}. Hence, the testing result demonstrated that Amotivation had a strong and significant influence on Satisfaction for work and Turnover intentions. Furthermore, in two relationships proposed in hypotheses H_{1a}, H_{1b}, the value of β between employee Amotivation and Turnover is biggest. Thus, Amotivation had the strongest effect on Turnover intentions.

Table 5 also confirmed that Intrinsic motivation had a significant and positive influence on Satisfaction for work ($\beta = 0.311$, P -value = ***) and had a significant and negative influence on Turnover intentions ($\beta = -0.249$, P -value = ***). This indicates that hypotheses H_{2a}, H_{2b} (table V) were supported.

However, with the P-value of 0.924, 0.250 for the relationship between Identified regulation and Satisfaction for work, Identified regulation and Turnover intentions respectively, the evidence indicated that there was no significant relationship between these variables. Thus, hypotheses H_{3a}, H_{3b} were rejected (Table 5). Additionally, since the finding presented that Extrinsic regulation social had no significant effect on Satisfaction for work ($\beta = 0.006$, P -value = 0.893), and Turnover intentions ($\beta = 0.040$, P -value = 0.250), the test failed to find support for hypothesis H_{4a} and H_{4b}.

With the P-value of 0.012 for the relationship between Introjected regulation and Satisfaction was non-significant,

hence hypotheses H_{5a} was confirmed (Table 5). However, as Introjected regulation had no effect on Turnover intentions ($\beta = 0.040$, P -value = 0.250), hypotheses H_{5b} was rejected.

The evidence proved that the influence of Extrinsic regulation material on Satisfaction for work ($\beta = 0.233$, P -value = ***) was positive and significant, supporting hypothesis H_{6a} . But, since the finding presented that Extrinsic regulation material had no influence on Turnover intentions ($\beta = 0.044$, P -value = 0.371), hypotheses H_{6b} was rejected.

Finally, due to the finding illustrated that there was a significant and negative effect of Satisfaction for work on Turnover intentions like proposed in the hypothesis, thus, hypothesis H_7 was supported (Table 5).

6. Discussion

The results confirm the high correlation between intrinsic motivation and satisfaction for university lecturers which has been shown in previous studies, albeit conducted in different education systems (Oshagbemi, 1997a, 1997b, 1997c, 2000). However, for public universities in Vietnam, the levels of employee satisfaction towards different aspects of their jobs, between job content (teaching and scientific research) and job content (administration, salary and benefits, supervision, colleague relationship and work conditions), vary greatly. It is clear that lecturers' satisfaction and dissatisfaction are directly affected by any changes in their work environment.

With regard to extrinsic motivation, extrinsic regulation (material) is found to have a positive influence on satisfaction, meaning financial rewards and job security if given when the employee has high performance will lead to his contentment. This finding improves existing knowledge of lecturer motivation, in developing countries in particular, when many argue financial pressure may not be as strong for public universities' academic staff as for those who work in private sectors given the unique nature of the former's work (teaching and research). The results show that material factors can motivate employees to work harder and lead to more satisfaction (Kiziltepe, 2008). On the other hand, the pattern for introjected regulation is the reverse, with lecturers' need for self-esteem and avoidance of shame or worry being a source of dissatisfaction. This may come from the over-expectation and higher opinion the public have for university lecturers, which creates excessive mental and emotional pressure on them.

The paper gives support to Kuvaas et al. (2016), which demonstrates that intrinsic motivation is negatively correlated with turnover intentions. A person who is interested in the job itself is less likely to leave his or her job due to a keen passion for it. However, a challenge to university management is that high intrinsic motivation does not necessarily lead to high performance, satisfaction and reduce turnover. It should be noted that an internally-

motivated lecturer, under the influence of unfavorable external factors, can become bored, demotivated, leading to the intention or even the decision to quit.

7. Managerial Implications and Conclusion

Given the importance of intrinsic motivation in generating satisfaction, universities' management should implement policies which enhance their interest in their jobs. In order to do this, more attention should be paid to various aspects of the job: skill variety, task identity, task significance, autonomy and feedback (Oldham, 1976). Lecturers should be encouraged to make their own decisions regarding their teaching and research as well as organizational structure. Universities should also provide constant, constructive feedback for their academic staff to improve their performance.

Financial incentives or punishments can also be used as reinforcers as these have been shown to have impacts on public university lecturers' behavior and intentions. Monetary rewards or termination may therefore encourage employees to work harder (PANCASILA et al., 2020)

Secondly, public universities are recommended to redesign work of their lecturers. It is important for lecturers to find their jobs significant and worthy and they should be responsible for their own performance. Redesigning jobs such be based on their characteristics such as academic standards, quality assurance, decision-making process, career promotion process.

Teaching is a well-respected profession in Vietnam and the pressure on university lecturers is even more intense because their jobs also involve doing research. Professional training and support are, therefore, needed so that lecturers can complete their tasks most effectively.

The paper aims to examine the relationship between the various types of motivation and satisfaction as well as turnover intentions of public university lecturers. Intrinsic motivation is found to affect both satisfaction and turnover, while for extrinsic motivation, only one type (i.e. extrinsic regulation (material)) has a significant effect on satisfaction. As can be expected, the relationship between satisfaction and turnover intentions is negative.

The limitations of the research should be noticed. In particular, this study is conducted among university lecturers in Vietnam, which limits its generalizability given differences in the cultures and education systems between Vietnam and other countries.

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