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Impact of Administrative Post and Gender on Lecturers' Research Motivation in Vietnam*

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Abstract

This study examines the simultaneous impact of gender and administrative post on the research motivation of university lecturers. There are 475 selected questionnaires that are qualified for data processing and the collected data are analyzed by two-way analysis of variance (ANOVA). The results show the relationship between administration involvement and scientific research of lecturers. In general, lecturers with administrative post have higher research motivation than lecturers without administrative post. More specifically, the level of administrative post has positive correlation with research motivation of female lecturers, but has negative correlation of male lecturers. It means that a female lecturer with higher administrative post also has more motivation to conduct research. Conversely, the higher administrative post a male lecturer has, the less research motivation he is. The cause of this difference is the pressure of earning money on Asian men, including Vietnamese men, who are considered to be main breadwinners of their family. When having an administration post, the more chances male lecturers have to earn money, the less time they can spend for scientific research. This suggests that the solution for managers is to perform annual assessment, fulfill promotion process, build up motivation and reward system, and establish recruitment and promotion policies.

Keywords: Motivation, Expectancy Theory, Administrative Post, Gender, Lecturers, Faculty Members

JEL Classification Code: J23, M10, M12, M19

1. Introduction

Lecturers play an important role in improving the quality of higher education (Hung & Tuan, 2020). World university rankings are based on the index of curriculum quality and academic activities of faculty members and students (Hu & Gill, 2000). As the competition among universities is getting higher, research is becoming increasingly important. Because scholarly activities and research productivity are used to measure the success of universities, it is becoming an increasingly important issue for universities to motivate faculty to be more productive in doing research. The rewards that a lecturer receives (i.e., finance, promotion and prestige, respect, etc.) relate quite closely to their research efforts (Chen, Gupta, & Hoshower, 2006).

Previous studies demonstrated that there is a positive correlation between research productivity and research motivation (Duc, Pham, Bui, Vu, & Nguyen, 2020; Chen, Gupta, & Hoshower, 2006; Tien, 2000). Specifically, those express a higher level of total motivation achieving better research performance. Therefore, the limitation of research activities is due to the lack of research motivation of lecturers. There are two research streams in the faculty research motivation. In the first stream, researchers examine personal and institutional factors that impact the research productivity

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of faculty members (Buchheit & Collins, 2001; Hu & Gill, 2000). According to these studies, personal characteristics such as ability, qualities, curiosity, and work attitude certainly have influences, but there are still other characteristics that may be important factors to academic achievement. In the second streams, studies have examined the changes of personal goals at different career stages (Englebrecht, Iyer, & Patterson, 1994; Read & Raghunandan, 1998). Studies have found that publication requirements for promotions and tenure have changed before and after receiving rewards. Tien (2000) has found that there is a difference in faculty's motivation of doing research at different times in his career, namely, before and after being promoted. According to Hu and Gill (2000), research productivity rises sharply in the first stages of a career, peeks at the time of tenure, and then begins to decline. The author could not find any previous studies that showed the impact of administrative posts on publication requirements. In addition, a few studies, which analyze gender differences, like Chen and Zhao (2013), have found gender differences in the faculty motivation of doing research. These studies' results show that male and female lecturers are motivated by different research rewards at different stages of their careers. Female lecturers are more motivated to do research than male and female lecturers also have higher internal motivation.

In developed countries, administration and research are two separated tasks; therefore, researchers tend to pay attention to conducting research, while managers focus on their administration tasks. However, in developing countries with weak science like Vietnam, administration tasks are not separated from doing research. One of the main goals of doing research is to be promoted to higher administrative posts. In another hand, Eastern cultures (typically Vietnam) consider man as the breadwinner in the family (Brickell, 2013). This consideration has created pressure on men to earn money whenever they have chances, like holding an administration post. This also creates the differences among administrators and researchers. Therefore, this study continues to follow the second research stream, which means changes in personal goals would be considered at different career stages, with and without administration post.

2. Literature Review and Research Framework

2.1. Motivation of the Study

Human motivation theories have been researched from the perspective of psychology and behavioral sciences. Different researchers and psychologists have provided various definitions of this term. Motivation is considered as an inner state of mind that makes a person behave in a certain way to achieve settled goals (Iwu-James, 2011). Motivation is something, which forces a person to act, a reason of behavior. Lockwood, Marshall, and Sadler (2005) define motivation as internal and external forces within a person that cause him or her to behave in a specific, goal-directed manner. In the sense of the process, research motivation of lecturers is the process in which a lecturer is stimulated, oriented, strengthened, and persistent in doing research (Venkatesh & Sharma, 2015; Mitchell, 1997).

Lecturers' research is any academic research, which is carried out by lecturers to contribute new knowledge about rules, phenomena (Creswell, 1986; Lertputtarak, 2008). Defined by Lertputtarak (2008), lecturers' research includes any academic activity that academic lecturers perform when they conduct a research, such as identifying research problems, conducting literature review, collecting data, analyzing data or writing research reports.

The majority of studies about lecturers' motivation for doing research consider the influence of internal and external factors on research motivation (Bailey, 1999; Chen, Gupta &, Hoshower, 2006; Hu & Gill, 2000). According to Hu and Gill (2000), research productivity rises sharply in the first stages of a career, peeks at the time of tenure, and then begins to decline. They also point out that research productivity before tenure is influenced by external factors, while research productivity after tenure is enhanced by internal factors. In his study, Chen and Zhao (2013) also mention achievement motivation along with external motivation and internal motivation. Achievement motivation can be defined as the need for success or excellent performance. Individuals will satisfy their needs through different means, and they are driven to succeed for various reasons, including both internal and external reasons. Based on achieving success and ambitions in life, achievement motivation represents a desire to demonstrate competence, and this motivation can affect the way a person performs a task (Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997). Some studies about the transformation between external and internal motivation, namely, Ryan's study (2014) and Blackmore and Kandiko (2011), find other factors concerning the research context. It is possible that research context will impact changes in personal needs in general and the need for success in particular (Achievement Motivation).

2.2. Hypotheses

There are many theoretical frameworks that are used to explain faculty's doing research. Some striking studies by Chen, Gupta, and Hoshower (2006); Tien (2000); Lertputtarak (2006) use Vroom's Expectancy Theory as the basic theory. While other theories focus on explaining external and internal motivational factors, Expectation Theory can explain these factors in more detail. Vroom's Expectancy Theory is explained by the equation:

$$M = E.\sum_{n=1}^{k}(V_k I_k)$$

M means Motivation Force (motivation for conducting behaviors)

E means "Expectancy". "Expectancy" is defined by Vroom (1964, p.20) as a temporary belief related to the possibility that a given behavior is going to match up with or lead to a specific outcome. This relates to an individual's perception that his or her effort is positively correlated with the good performance. If you increase your efforts, will your work results increase or not?

V_k means "Valence". Vroom (1964, p.17) defines "Valence" as referring to "the interest and importance or the value a person places on a "*k*" reward". A reward has low or no value if that person does not wish to receive the reward and vice versa.

I_k means "Instrumentality". Instrumentality is the perception that a given level of performance is related to a "*k*" outcome. Vroom (1964, p.22) argues that "a means of expressing an individual's perception of the possibility that his performance will give him a commensurate reward".

k is the k^{th} reward, k runs from 1 to n, which means an unlimited number of rewards. This unlimited number of rewards has also been tested in some studies; k includes external and internal rewards.

However, as the expected component E has low predictability, some previous studies, such as Tien (2000), Chen, Gupta, and Hoshower (2006) multiple the reward value (V_k) with the ability to receive a reward (I_k) to have extrinsic motivation (EXTMOT) and intrinsic motivation (INTMOT). Therefore, the overall research motivation (MOT) is equal to the sum of EXTMOT and INTMOT (Figure 1).

Our first goal is to examine the different impacts of administration post to overall motivation, internal motivation and external motivation. In Vietnam, holding an administration post is a need that many lecturers care about. Chen and Zhao (2013) mention administration post as an external factor that has very limited impacts on research motivation of Taiwan lecturers.

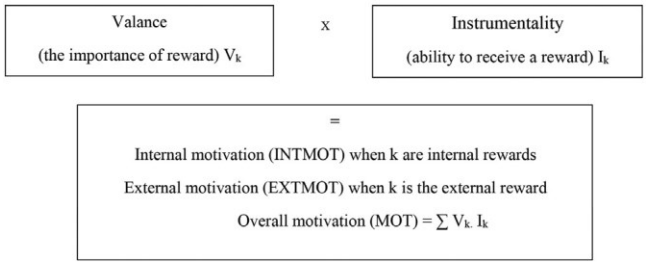

Figure 1: The Extended Expectancy Theory

In developed countries, administration and research are two separated tasks; therefore, researchers tend to pay attention to conducting research, while managers focus on their administration tasks. However, in developing countries with weak science like Vietnam, a person could not afford the living expenses of his family and himself if he only focuses on researching. As a result, he has to research and earn money at the same time. Studies in developed countries like Taiwan show that administration post is the lowest goal of lecturers when conducting research. While in Vietnam, Nguyen, Klopper, and Smith (2016) shows that promotion in career is a factor that promotes research productivity. In fact, the majority of Vietnamese lecturers start their maturity stage of research while they start to be an administrator. This provides a good condition for lecturers to be more active in research. Other studies suggest that confidence positively affects research productivity and motivation (Bailey, 1999; Vasil, 1993). According to Bailey (1999), the higher self-confidence will help individuals persevere and persist with tasks that are more difficult and challenging. Vasil (1993) suggested that this personal confidence increases with lecturers'research experience and qualifications. On the other hand, lecturers with administration post also have higher academic goals (like professor and vice professor), so they can continue achieve higher administration positions, due to the current mechanism in Vietnam universities. Therefore, in the context of Vietnam, while the publication of international research is relatively new, administration post is determined to have strong impact on research motivation of lecturers. Therefore, we propose the following research hypotheses:

H1*: The overall research motivation of lecturers with an administration post is higher than lecturers without an administration post.*

H1a*: The internal research motivation of lecturers with an administration post is higher than lecturers without an administration post.*

H1b*: The external research motivation of lecturers with an administration post is higher than lecturers without an administration post.*

Tien (2000) finds that there is a difference in faculty's motivation of doing research at different times in lecturers' career, namely, before and after being promoted. In Chen and Zhao (2013), the time leading to the difference in research motivation is before and after tenure. This study's results show that male and female lecturers are motivated by different research rewards at different stages of their career. Female lecturers are more motivated to do research than male; and they also have higher internal motivation. Thus, there is a particularly profound gender difference among the male and female faculty after tenure. Female lecturers find internal research rewards more attractive and

more important than male. Following this research direction, besides clarifying the difference in research motivation of faculty with and without administrative post, we set out the second goal: examining if the interaction between gender and administrative post of lecturers affects their research motivation or not.

Many young lecturers have to face many obstacles from their family, like childcare and living expense cost at the beginning of their career, when they don't have an administration post. However, at later stages of their career, these obstacles are removed. In addition, female lecturers, who have administration post, also receive the support from their family. This support, combining with their personal effort and strong will, has promoted their research productivity (Nguyen, 2013). Together with changes in gender roles, new family models have expanded the economical role of women and encouraged man to get involved more in family tasks, like childcare (Oláh, Kotowska, & Richter, 2018). In developing countries like Vietnam, man is considered to be the breadwinner of the family, which also brings them high pressure of earning money. Vietnamese has the phrase "men build the house, women build the home" and this culture is revealed by Brickell (2013). Therefore, when having an administration post, men have more chances of making money and developing their careers from the role of administrators rather than researchers (writing magazine articles, seminars, etc.). As a result, the time they spend for scientific research would decrease. Therefore, we propose the following research hypotheses:

H2: *Female administrators have higher research motivation than male administrators.*

H2a: *Female administrators have higher internal motivation than male administrators.*

H2b: *Female administrators have higher external motivation than male administrators.*

3. Research Methodology

3.1. Sample and Data Collection

The subject of the study are lecturers who are teaching and researching in the fields of economic, management and business administration at universities in Vietnam. The research applied the convenient sampling method. The questionnaires were directly sent to lecturers at scientific conferences, sent out via e-mail and Facebook, the questionnaires were designed on google docs and directly sent to the lecturers. The detailed sample includes 475 questionnaires as follows: 69.7% female lecturers and 30.3% male lecturers; 30.7% of lecturers hold administrative posts and 69.3% of lecturers do not hold administrative posts.

3.2. Scale and Questionnaire Development

In order to collect data for this study, the questionnaire is developed based on basis indicators that measure definition in the research model. But before establishing the questionnaire with a small scale, we interview 11 lecturers to examine the definitions of variables and indicators (i.e., indicator of promotion rewards is replaced by rewards of academic/ career titles and indicator of payroll rewards is eliminated as it is not suitable in Vietnam). In addition, the questionnaire also includes demographic questions, such as gender, age and academic title. All indicators are translated to Vietnamese though a forward and reverse process. After that, the questionnaire is tested with a small amount of lecturers to avoid the misunderstanding of content and to adjust the final format. The final indicators, which are used in our official research, are shown in Table 1.

This study summarizes 17 rewards that can be achieved from scientific research activities, including 9 external rewards and 8 internal rewards. Indicators of "Valence" variable indicate the importance of rewards and are measured from 1 (extremely unimportant) to 5 (extremely important). Indicators of "Instrumentality" indicate the possibility of receiving these rewards with certain research results and are measured from 1 (totally disagree) to 5 (totally agree).

The corresponding values of external motivation of external rewards (EXTMOT) and internal motivation of internal rewards (INTMOT) are equal to the reward value (V_k) multiplied by the ability to receive a reward (I_k). According to The Expectation Theory, the overall motivation (MOT) is equal to the sum of the external motivation (EXTMOT) and the internal motivation (INTMOT).

3.3. Data Analysis

To examine the proposed hypotheses, the study uses Two-way Anova analysis and Post-hoc Anova by Tukey Test, using SPSS software version 23. All testing variables include Administrative post (No = 0, Yes = 1) and Gender (Female = 0, Male = 1).

4. Research Results

4.1. Results of Hypotheses H1, H1a, H1b

Table 2 shows Levene's test results of all dependent variables, including MOT, INTMOT, and EXTMOT. All these variables have p-value greater than 0.1, which means the variance of all above variables have no statistical difference between gender and administration post. Therefore, ANOVA analysis results can be used. By using Post-hoc ANOVA Analysis through Turkey testing, we have the main results in Table 3.

Table 1: Research Indicators and Scale

Research Scale	Source
External Reward Valence (Vk)a: "The importance of external rewards"	
Salary Raises (V_1)	Chen, Gupta and Hoshower (2006)
Getting monetary bonuses (V_2)	Tien (2000); Chiang and Jang (2008)
Getting an administrative assignment (V_3)	Update of Chen, Gupta and Hoshower (2006) and Tien (2000)
Getting an academic title (V_4)	
Holding an administrative post (V_5)	Chen, Gupta and Hoshower (2006)
Getting chaired professorship (V_6)	
Reducing teaching loads (V_7)	
Satisfying need to stay current (V_8)	
Finding a better position at other institution (V_9)	
Internal Reward Valence (Vk)a: "The importance of internal rewards"	
Achieving peers' recognition and students' respect (V_{10})	Chen, Gupta and Hoshower (2006)
Satisfying one's needs to contribute to new knowledge (V_{11})	
Satisfying one's needs for creativity or curiosity (V_{12})	
Having collaborations with others (V_{13})	
Satisfying one's needs to stay current in the field (V_{14})	
Having joy of participating research (V_{15})	Tien (2000)
Overcoming challenging work tasks (V_{16})	Chiang and Jang (2008)
Feeling very good about myself (V_{17})	
External Instrumentality (Ik)b: "Receive external rewards with certain research results"	
Salary Raises (I_1)	Chen, Gupta and Hoshower (2006)
Getting monetary bonuses (I_2)	Tien (2000); Chiang and Jang (2008)
Getting an administrative assignment (I_3)	Update of Chen, Gupta and Hoshower (2006) and Tien (2000)
Getting an academic title (I_4)	
Holding an administrative post (I_5)	Chen, Gupta and Hoshower (2006)
Getting chaired professorship (I_6)	
Reducing teaching loads (I_7)	
Satisfying need to stay current (I_8)	
Finding a better position at other institution (I_9)	
Internal Instrumentality (Ik)b: "Receive internal rewards with certain research results"	
Achieving peers' recognition and students' respect (I_{10})	Chen, Gupta and Hoshower (2006)
Satisfying one's needs to contribute to new knowledge (I_{11})	
Satisfying one's needs for creativity or curiosity (I_{12})	
Having collaborations with others (I_{13})	
Satisfying one's needs to stay current in the field (I_{14})	
Having joy of participating research (I_{15})	Tien (2000)
Overcoming challenging work tasks (I_{16})	Chiang and Jang (2008)
Feeling very good about myself (I_{17})	Chiang and Jang (2008)

[a] Measure scale is from 1 (extremely unimportant) to 5 (extremely important).
[b] Measure scale is from 1 (totally disagree) to 5 (totally agree).

Table 2: Levene's' Test of Equality of Error Variances

Dependent Variable	F	*p*-value
MOT	1.577	0.193
INTMOT	0.548	0.649
EXTMOT	3.406	0.117

Table 3: The results of main testing

Item	Administration Post (0 = No; 1 = Yes)		Gender*Administration Post	
	Mean Difference	*p*-value	Mean square	*p*-value
Part A: Research Motivation				
MOT	1.503	0.036	5801.440	0.024
INTMOT	4.848	0.033	6461.249	0.011
EXTMOT	–3.345	0.185	30.682	0.870
Part B: The importance of rewards to lecturers (V_k)				
External rewards				
Salary Raises (V_1)	–0.115	0.097	3.284	0.052
Getting monetary bonuses (V_2)	–0.170	0.013	1.605	0.166
Getting an administrative assignment (V_3)	0.077	0.265	1.555	0.694
Getting an academic title (V_4)	0.106	0.121	0.024	0.866
Holding an administrative post (V_5)	0.187	0.018	1.469	0.226
Getting chaired professorship (V_6)	0.260	0.000	1.369	0.167
Reducing teaching loads (V_7)	–0.028	0.676	0.947	0.288
Satisfying need to stay current (V_8)	–0.031	0.629	0.212	0.596
Finding a better position at other institution (V_9)	–0.064	0.362	0.020	0.960
Internal rewards				
Achieving peers' recognition and students' respect (V_{10})	0.160	0.002	0.534	0.302
Satisfying one's needs to contribute to new knowledge (V_{11})	0.147	0.006	2.329	0.033
Satisfying one's needs for creativity or curiosity (V_{12})	–0.064	0.341	0.390	0.489
Having collaborations with others (V_{13})	0.098	0.058	0.211	0.510
Satisfying one's needs to stay current in the field (V_{14})	0.152	0.002	0.401	0.322
Having joy of participating research (V_{15})	0.056	0.312	0.015	0.872
Overcoming challenging work tasks (V_{16})	0.063	0.245	0.564	0.303
Feeling very good about myself (V_{17})	0.085	0.107	0.379	0.384
Part C: Lecturers' awareness of the ability to receive rewards with certain research results (I_k)				
External rewards				
Salary Raises (I_1)	–0.169	0.053	0.032	0.879
Getting monetary bonuses (I_2)	–0.081	0.313	2.020	0.188
Getting an administrative assignment (I_3)	0.032	0.668	1.118	0.296
Getting an academic title (I_4)	0.128	0.053	0.001	0.972
Holding an administrative post (I_5)	0.188	0.012	1.909	0.170
Getting chaired professorship (I_6)	0.209	0.000	0.037	0.801
Reducing teaching loads (I_7)	–0.136	0.123	2.351	0.195
Satisfying need to stay current (I_8)	–0.123	0.086	0.597	0.421
Finding a better position at other institution (I_9)	0.226	0.003	7.205	0.008
Internal rewards				
Achieving peers' recognition and students' respect (I_{10})	0.211	0.000	0.025	0.842
Satisfying one's needs to contribute to new knowledge (I_{11})	0.073	0.205	3.723	0.012
Satisfying one's needs for creativity or curiosity (I_{12})	0.021	0.079	1.889	0.136
Having collaborations with others (I_{13})	0.015	0.800	0.322	0.484
Satisfying one's needs to stay current in the field (I_{14})	0.030	0.593	3.788	0.010
Having joy of participating research (I_{15})	0.022	0.718	8.567	0.000
Overcoming challenging work tasks (I_{16})	0.050	0.391	11.123	0.000
Feeling very good about myself (I_{17})	0.149	0.009	4.313	0.007

The testing results in Table 3 show that the administrative post affects the overall research motivation MOT (p-value = 0.036 < 0.05). The administrative post also affects the internal motivation INTMOT (p-value = 0.033 < 0.05) but doesn't affect the external motivation EXTMOT (p-value = 0.185 > 0.05).

The results of mean difference in Table 4 also provide specific conclusion of administration post. To be more detailed, overall motivation MOT of lecturers with administrative post is higher than lecturers without administrative post at the *95*% confidence interval (Mean Difference = 1.503), hypothesis H1 is supported. This difference happens especially at internal motivation INTMOT (Mean Difference = 4.848), so hypothesis H1a is supported. There is no difference of external motivation between lecturers with and without administrative post, so hypothesis H1b is rejected.

The result of Part B in Table 3 shows that lecturers with administration post value reward V_5 (Holding an administration post) and V_6 (Getting chaired professorship) more than lecturers without an administration post. However, lecturers with administration post find reward V_2 (Getting monetary bonuses) less attractive than lecturers without administration post. There are significant differences between lecturers with and without administration post for most of internal rewards. Lecturers with administration post find internal rewards more important than lecturers without administration post. There are two internal rewards, including V_{11} (Satisfying one's needs to contribute to new knowledge) and V_{14} (Satisfying one's needs to stay current in the field), that their differences have significant statistic. These results have led to the conclusion that lecturers with administration post have higher interest to different rewards than lecturers without administration post.

The results of Part C in Table 3 show lecturers' awareness of the ability to receive different rewards. Lecturers with administration post show more agreement than lecturers without administration post that research results impact both external and internal rewards. Three external rewards, including I_5 (Holding an administrative post], I_9 (Finding a better position at other institution), I_6 (Getting chaired professorship) and two internal rewards, including
I_{10} (Achieving peers' recognition and students' respect), I_{17} (Feeling very good about myself]) show significant statistic. Therefore, we can conclude that lecturers with administration post are more confident than lecturers without administration post that research results can lead to both external and internal rewards.

4.2. Results of Hypotheses H2, H2a, H2b

Table 3 shows that the interaction between Gender * Administrative post for MOT has p-value = 0.024 < 0.05, for INTMOT, p-value = 0.011 < 0.05. This means the impact of administrative post on MOT, INTMOT depends on lecturers' gender or the impact of gender on MOT, INTMOT depends on the lecturers' administrative post. This dependence is shown in Figure 2a and 2b.

This figure shows that the research motivation of female lecturers increases when they hold an administrative post. In contrast, the research motivation of male lecturers decreases when they hold an administrative post. In other words, female lecturers' have higher motivation than male lecturers when they hold higher administration post. Therefore, hypothesis H2 is supported.

This graph shows that the internal motivation of female lecturers increases when they hold an administrative post. In contrast, the internal motivation of male lecturers decreases when they hold an administrative post. Therefore, hypothesis H2a is supported.

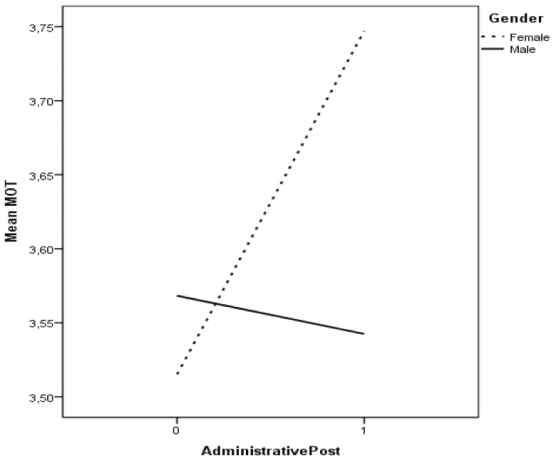

Figure 2a: Simultaneous Impact of Gender and Administrative Post on MOT

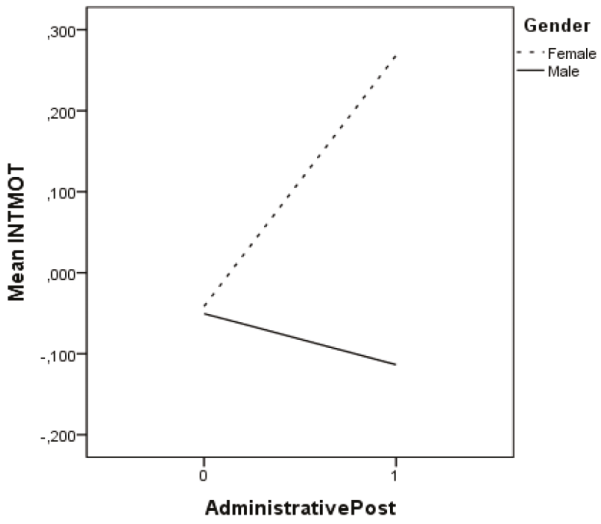

Figure 2b: Simultaneous Impact of Gender and Administrative Post on INTMOT

The testing results show that the interaction between age and administrative post does not affect EXTMOT (p-value = 0.870 > 0.05). It means there is no evidence that the impact of gender on EXTMOT depends on lecturers' administrative post or the impact of administrative post on EXTMOT depends on lecturers' gender. Therefore, hypothesis H2b is rejected.

The interaction between gender and administration post has almost no effect on lecturers' judgment to the importance of rewards. There is only one internal reward, which is V_{11} (Satisfying one's needs to contribute to new knowledge) that has statistically significant impact. Figure 3f shows that the higher administration post female lecturers have, the more important they evaluate the rewards than male lecturers do.

The interaction between gender and administration post effects on lecturers' awareness about how research result can impact different rewards. This interaction is shown in Table 3 and Figure 3. Accordingly, female lecturers with administration post show more agreement than male lecturers with administration post that research results impact almost internal rewards, including I_{11} (Satisfying one's needs to contribute to new knowledge), I_{14} (Satisfying one's needs to stay current in the field), I_{15} (Having joy of participating research), I_{16} (Overcoming challenging work tasks), I_{17}(Feeling very good about myself) (Figure 3a, 3b, 3c, 3d). But for external rewards, female lecturers with administration post show less agreement than male lecturers with administration post. There is only one external reward that shows the impact, which is I_9 (Finding a better position at other institution) (Figure 3h). In general, the higher administration post female lecturers have, the more they believe that research results can lead to internal rewards. In contrast, the higher administration post male lecturers have, the less they believe that research results can lead to internal rewards than female lecturers.

5. Discussion and Implications

This study finds the impact of administration post. Our results show that lecturers with administration post have higher research motivation than lecturers without administration post. And the same result can also be found at internal motivation. In the studies of Chen, Gupta and Hoshower (2006), Chiang and Jang (2008), Feldman and Paulsen (1999), administrative post is mentioned. Chen, Gupta and Hoshower (2006) argues that administrative post has the least importance to lecturers; therefore, it has the least impact on research productivity, as research and are two separated tasks in developed countries. This maybe not correct with the reality of Vietnam, as the nature of administrative post and research is different; although these activities are complementary. In the other hand, if lecturers have to research and hold an administrative post at the same time, they would spend less time for research activities. However, our study finds that this conclusion is not always correct for all lecturers in all contexts. Our study shows that the difference of gender is especially profound among female and male with/ without administrative post. Female lecturers with administrative post have higher overall motivation and internal motivation than male lecturers with administrative post. No interaction is found between gender and administrative post on external motivation. The same result is also found in previous studies on education and psychology (Conti, Collins, & Picariello, 2001; Vallerand et al., 1992) and especially the study of gender differences in research productivity by Chen and Zhao (2013).

While examining components of research motivation, we find that lecturers with administration post care more about different rewards (i.e., salary, bonus, promotion, including title promotion and faculty promotion) than lecturers without administration post. Moreover, lecturers with administration post are more confident than lecturers without administration post that research results can lead to both external rewards (i.e., administration assignment, getting chaired professorship, finding a better position at other) and internal rewards (i.e., achieving peers' recognition and students' respect, feeling very good about myself). The interaction between age and administration post has almost no effect on lecturers' judgment to the importance of rewards. However, the higher administration post female lecturers have, the more they believe that research results can lead to almost internal rewards, such as satisfying one's needs to contribute to new knowledge, satisfying one's needs to stay current in the field, having joy of participating research, overcoming challenging work tasks and feeling very good about myself.

While Tien (2000) concludes that lecturers' research productivity decreases after their promotion, Chen and Zhao (2013) find the difference gender in research motivation. In addition, Chen, Gupta, and Hoshower (2006) also show that lecturers' participation in research increases before promoting and decreases after promoting. While Nguyen, Klopper, and Smith (2016) show that titles or career promotion is a factor that strongly motivates Vietnamese lecturers, our study finds that, with administration post, female lecturers have an increase in research motivation and male lecturers have a decrease in research motivation. In Vietnam's context, when starting research, Vietnamese lecturers have lower research ability than lecturers in developed countries. So, Vietnamese lecturers with administration post also fulfill their research ability, which in turn allows them to research more actively. In addition, other obstacles, which can happen to young lecturers, like economical barriers, are also removed. Female lecturers, who have administration post, also receive the support from their family. Female lecturers also have higher personal effort and strong will than male lecturers at the

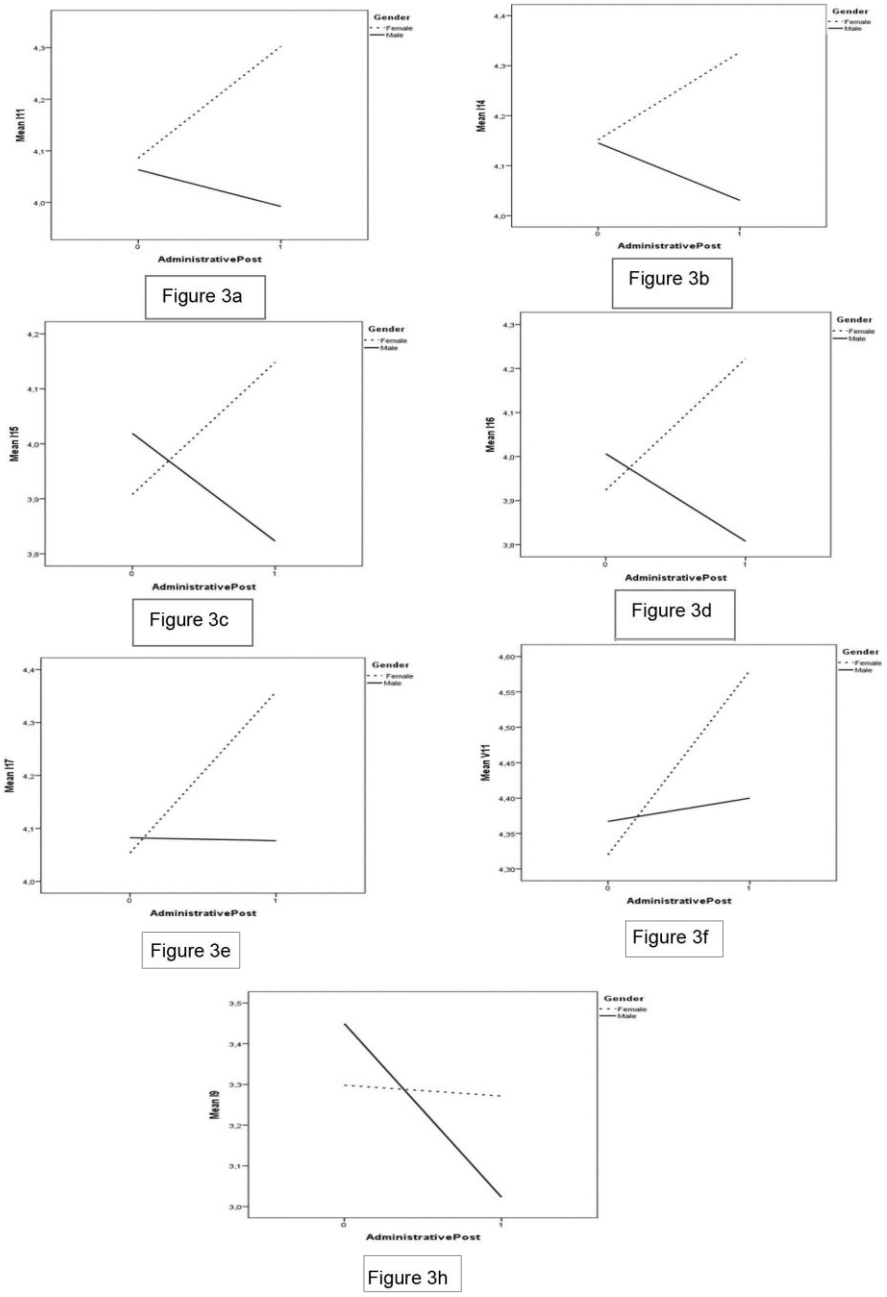

Figure 3: Simultaneous Impact of Gender and Administrative Post on other Motivation Factors

same administration post (Chen & Zhao, 2013). These factors have made the research productivity of female lecturers higher than male lecturers. On the other hand, the study also confirms the pressure of earning money on Asian men, including Vietnamese men, who are considered to be the breadwinner of the family. Therefore, when having an administration post, the more chances male lecturers have to earn money, the less time they spend for scientific research.

The results of this study can provide necessary and valuable information for universities and educational institutions to analyze the lecturers' research motivation, perform annual assessment, fulfill promotion process, build up motivation and reward system and establish recruitment and promotion policies. In addition, with these results, organizations can actively enhance lecturers' research motivation by establish specific reward system for each type of lecturers.

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