The Effects of Human Resources Management on Developing Teachers of Non-Public Universities in Vietnam

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Abstract

Human resource management in Private Universities have a big impact on the development of human resources for lecturers in universities. Human resource management mainly affect the development of resource of lecturers in a university, which can be divided into the 8 functions: Recruitment, arrangement and utilization of lecturers, working environment, human resource development policy, remuneration and compensation policy, training and development, school information communication, and school budget. Among these 8 factors, recruitment has the biggest influence and human resource development policy has the smallest influence on the development of the university’s faculty. Based on the research results, the author has given some recommendations about managing human to promote the development of faculty in private universities.

Keywords: Human Resources Management, development of faculty in non-public universities

1. Situation

Over nearly 30 years of building and development, non-public education in Vietnam has had a remarkable development. Initially, there were only 5 non-public universities, so far there are 60 non-public universities, accounting for 25% of the total number of nationwide universities and institutes (now there are 235 universities, institutes and academies nationwide). The number of students and lecturers was very small, by the 2018-2019, the non-public education system had 15,158 lecturers (accounting for 20.8% of the total number of teachers nationwide) and 243,975 students enrolled (accounting for 13.80% of the total number of students.
nationwide), contributing to the state budget reached 111 billion dong. If the Government has to spend around 25 million VND per student per year in public universities. However, for the 2018-2019, non-public universities have saved about 6,000 billion VND. The above results show that the non-public education system plays a good role in contributing to the training of high quality human resources for the society. In addition to the achievements, the non-public education system still has many problems.

Firstly, lecturers who are belonged to the university are very few, and the qualifications of teachers are limited. Most of the teachers who are highly qualified and have a degree are elderly. They just can teach at non-public universities after retiring from public universities.

Secondly, it is very difficult to attract young and highly qualified teachers with degrees to be lecturers.

Thirdly, the lecturers at non-public universities are not stable. Many young teachers after a period of striving for higher degrees, they apply to transfer to public universities or quit to work there, so in fact, the faculty at non-public universities is only 20% of the requirements.

How to change the way to manage human resources at non-public universities, which helps to support the development of faculty to adapt for current requirements. That is a question for human resource management.

The article focuses on analyzing in-depth the impact of human resource management on the development of faculty at non-public universities in Vietnam.

2. Literature Review

2.1 Human Resource Management Affects the Development of Lecturers

Human resource management is affecting the development of lecturers at non-public universities include the following main factors:

- Policy for developing human resources of lecturers (CSPTNNL)

The human resources development policy of a university is a system of perspectives and goals on training, using and developing human resources with specific actions which are affirmed and applied to solve problems by the school's leadership in the process of developing lecturers.

The human resources development policy of a university will fundamentally determine the development of faculty at this university (Mikkelsen, A. and Grønhaug, K., 1999). According to Pellert, A. (2007) and Spottl, G. (2013), HR development policy for faculty in universities includes the selection of development goals, action methods to achieve the goals and supporting policy for developing faculty at universities.

Many studies have shown that in order to develop faculty, firstly, universities need to have a correct and accurate policy on developing human resources (Verloop, N., Driel, JV, & Meijer, P, 2001; Wiske, S., 2001; Mikkelsen, A. and Grønhaug, K., 1999; Verloop, N., Driel, JV,
Meijer, P, 2001). King Abdulaziz and Jamia Millia Islamia (2014) Researches such as Verloop, N., Driel, J.V, & Meijer, P (2001) go into depth analysis of the role of goal setting and human resource development strategy in influencing the building faculty of the university.

- Remuneration and compensation policy for lecturers (CSDN&TL)

Compensation is an individual reward which is received to exchange for his or her labor. Remuneration includes something about financial and non-financial (Griffin, GA (Ed.) (1983). Remuneration and compensation policies commensurate with the dedication of faculty which will have a positive effect on the development of faculty staff at the university. The research of Griffin,GA (Ed.) (1983) analyzes the role of remuneration and compensation policies for faculty to attract potential teachers from outside. It is also the motivation for talent people to develop their careers path. Potiyanuwat, P & Wiratchai, N (1999) emphasized the role of material and financial incentives for workers. According to Potiyanuwat, P et al., although making money is not the only motivation for them to develop their talents but it has an important role for them to devote to their full potential because in the end people go to work because of the money. Supporting the idea that universities should increase remuneration and compensation for faculty and see it as an important tool to encourage potential and talented faculty, there are also some researchs such as (Norton, L., J. Richardson, J. Hartley, S. Newstead, and J. Mayes, 2005; Verloop, N., Driel, J.V., & Meijer, P, 2001; etc).

- The recruitment (TD)

Recruitment is the process of collecting human who are suitable to the needs of an organization to meet the requirements of performing jobs in that organization. Recruitment is a part of the development of human resources in terms of quantity for the organization and has a significant impact on the quality of the recruited human resources Weick, K. E. (1976) and Werner, J.M.; DeSimone, R.L. (2012). Recruitment has an impact on the development of lecturers of faculty in terms of quantity (increasing human resources from outside to the university) and at the same time affecting the quality of the recruited faculty (Khan, I. A., 2012; Griffin, G.A. (Ed.), 1983; Pawar, I.A. & Mouli, S.C, 2008). The studies of Ellis et al. (2012); Hales and Clarke (2016); Weick, K. E. (1976) and Werner, J.M.; DeSimone, R.L (2012) said that recruiting new faculty for the university is related to the university's human resources development strategy in terms of both quantity and quality. Authors such as Khan, I. A.(2012); Griffin, GA (Ed.), (1983); Pawar, IA & Mouli, SC (2008) analyzed how to recruit to ensure attracting talents for the university while ensuring resoneable cost for recruitment. Recruitment must be in line with the university’s development strategy in general and the human resources development strategy in particular.

- Training and development of faculty of a university (DT&PT)

The training and development of university faculty is one of the most important factors affecting the development of faculty human resources of universities (Spottl, G. (2013). According to research by Nguyen Van Ha (2008) the quality of human resources is the most important measure of the human resources development of an organization and in which
training and development plays a key role for creating the quality of human resources of that organization.

Many researches have affirmed the important role of training and development has a significant impact on the development of human resources of university faculty. Some recent prominent studies are Spottl, G. (2013); Pellert, A. (2007); Vincent-Lancrin, S. (2011); Vincent-Lancrin, S. (2011); Goswami, D. (2010); both affirm the role of training and development in relation to faculty development, but the studies all emphasize: training and developing need to clearly define who to be trained, who are trained with prospects or not? Training methods and forms of training, etc. should be flexible, not too rigid.

- School budget (NS)

The budget of a university is understood as all the school's revenues and expenditures made in one year to ensure that the school can operate and perform its educational and training functions. Roger Bennetta and Suzanne Kaneb (2014) and IntakhabAlam Khan and A.Naseeb Khan (2014) also emphasized the importance of school budget related to the development of human resources of the university's faculty. The authors focus on analyzing the effects of finance that affect all activities of the university, including the university's human resources development. The above authors all said that besides there are many tools to develop human resources of faculty, the factor of school budget is important that cannot be skipped. Managers need solutions to increase income for the school through teaching activities, researching applied topics for production and business units, or expand social relations to attract funding from individuals as well as government and non-government organizations.

Synthesizing researches, the author has synthesized activities affecting the development of human resources of university faculty as following table.

Table 1. Managing activities have effects on development of HR faculty in a university

| No. | Activities                                      | Authors of researchs                                                   |
|-----|------------------------------------------------|------------------------------------------------------------------------|
| 1   | School information communication                | Goswami, D. (2010), Griffin,G.A.(Ed.) (1983) và Khan, I .A. (2012), Pawar,I.A.&Mouli,S.C.(2008)); (Griffin,G.A.(Ed.) (1983); |
| 2   | Arrangement and utilization of lecturers        | của K Akyeampong, K Lussier, J Pryor & J Westbrook, 2013; M Akiba, YL Chiu, K Shimizu & G Liang, 2012; (K Akyeampong, K Lussier, J Pryor & J Westbrook, 2013). |
| 3   | Work-place at the university                   | M Akiba, YL Chiu, K Shimizu & G Liang (2012); K Akyeampong, J Pryor, J Westbrook & K Lussier, (2013); Kwakman, K. (2003), M Akiba, YL Chiu, K Shimizu & G Liang (2012); Mikkelsen, A. and Grønhaug, K. (1999), Kwakman, K. (2003), |
|   | Human resource development policy | Verloop, N., Driel, J.V., & Meijer, P. (2001); Wiske, S. (2001); Mikkelsen, A. and Grønhaug, K. (1999), Verloop, N., Driel, J.V., & Meijer, P. (2001); King Abdulaziz và Jamia Millia Islamia (2014); Verloop, N., Driel, J.V., & Meijer, P. (2001) |
|---|---|---|
| 5 | Remuneration and compensation policy | Griffin, G.A. (Ed.) (1983); Pitthyenuwat, P & Wiratchai, N (1999); Norton, L., J. Richardson, J. Hartley, S. Newstead, and J. Mayes (2005); Verloop, N., Driel, J.V., & Meijer, P. (2001) |
| 6 | Recruitment | Ellis et al. (2012); Hales và Clarke, (2016); Weick, K. E. (1976); Werner, J.M.; DeSimone, R.L. (2012); Khan, I.A. (2012); Griffin, G.A. (Ed.) (1983); Pawar, I.A. & Mouli, S.C. (2008) |
| 7 | Training and development | Spottl, G. (2013); Pellert, A. (2007); Vincent-Lancrin, S. (2011); Vincent-Lancrin, S. (2011); Goswami, D. (2010); |
| 8 | School budget | Roger Bennetta and Suzanne Kaneb (2014) and Intakhab Alam Khan and A. Naseeb Khan (2014); |

Sources: Synthesis of author

2.2 Developing Human Resources of Lecturers in Universities

The development of lecturer human resources in a university is the process of developing among quantity, quality and structure of lecturers of a university which is more and more reasonable to meet the development requirements of the university. It is the process of increasing the quantity, improving the quality on the physical, mental, skill and spiritual aspects along with the change in the human resource structure that is increasingly reasonable to meet the teaching requirements of the university.

Quantitative development: showing the increase in quantity, but ensuring the structural synchronization in the faculty, including: age structure, gender structure, industrial job structure. Industrial job structure means the ratio of lecturers among divisions, faculties and programs of disciplines. If this ratio is consistent with the prescribed norm, there will be a reasonable professional structure.

Quality development: The quality of university faculty shows development in the following 3 basic factors:

- **Professional capacity**: is the professional level where the lecturer is trained at the bachelor, master or doctor level.
- **Research capacity**: lecturers' scientific research capacity is shown in published scientific works, especially those published in international journals; these researches will enhance the credibility of individuals and organizations, which have an important supportive effect on improving the quality of lecturers and instruction for students about scientific researches.

- **Pedagogical capacity** is a psychological capacity, expressing the proficiency and artistic and creative level of teachers in teaching activities, it includes a system of skills: communication skills; pedagogical behavior; writing boards and presenting boards; using teaching technical methods; organize and control students' independent work; convey information to students in a concise, easy to understand way; proficient use of language and non-verbal language; educating and convincing to form beliefs for learners.

3. **Research Methods**

3.1 **The Researches Are Carried Out as Following Steps**

**Step 1**: synthesize documents on managing activities affecting the development of human resources of faculty of the university as a base for building research model.

**Step 2**: From the synthesis of research results, the research model of managing activities affecting the development of faculty of non-public university was initially established.

The results of the synthesis of research documents and initial interview results have identified 80 criteria showing the related factors affecting the development of faculty of non-public university. In order to reduce the number of these observed variables to make the research model simpler and more focused on the research problem, a group of 5 experts was invited to evaluate.

Using the Delphi round 2 questionnaire method to evaluate:

**Round 1**: each expert will evaluate the representativeness of the criteria representing each factor, the criteria that are duplicated or reflect the impact of factors with faintness will be removed.

**Round 2**: experts discuss to give the final assessment of the criteria for which criteria have not been reached. Finally, the criteria are selected which will be added as a scale of the impact assessment model of the factors on the development of faculty of non-public university.

**Step 3**: Based on the evaluation criteria of the scale of the impact of managing activities on the development of faculty of non-public university will be tested through survey evaluation of the subjects as it is mentioned above. The assessment scale of the survey uses a Likert scale of 5 levels: 1: strongly disagree; 2: disagree a part; 3: neutral; 4: agree; 5: strongly agree.
Step 4: Set up the questionnaire, determine the sample size.

Step 5: Conduct collecting data. Collected data will be encrypted and scanned, then put into SPSS software. Run and process data. Conduct tests, run the results and then analyze the results.

3.2 Research Design

3.2.1 Research Sample Identification

- **Sample size:**

  The number of survey samples is calculated according to a random formula to ensure the representative of the study. The sample is determined by the formula Slovin as follows:

  \[ n = \frac{N}{1 + N \cdot \frac{\hat{\alpha}^2}{2}} \]

  Where \( n \): sample size; \( N \): Overall sample - According to the Ministry of Education and Training's statistics by 2018 the number of non-public university lecturers is \( N = 15158 \)

  \( \hat{\alpha} \): sample confidence level = 0.05; Result \( n = 390 \)

- **Subject:**

  The sample includes lecturers from non-public universities, managing level: principals, administrators and faculty in departments of the university. Senior lecturers were divided into 4 levels: less than 5 years; 5 - 10 years; 10 - 15 years and over 15 years. With enough qualifications from bachelor to doctorate.

Table 2. Descriptive statistic of research samples

| Objects            | Ratio | Percentage (%) | Accumulated percentage (%) |
|--------------------|-------|----------------|-----------------------------|
| (1)                | (2)   | (3)            | (4)                         |
| **1. Gender**      |       |                |                             |
| Male               | 178   | 45.6           | 45.6                        |
| Female             | 212   | 54.4           | 100.0                       |
| **Total**          | 390   | **100.0**      |                             |
| **2. Age**         |       |                |                             |
| Under 30 years old | 14    | 3.7            | 3.7                         |
| 30 – under 40 years old | 129  | 33.0           | 36.7                        |
| 40 – under 50 years old | 137  | 35.2           | 71.9                        |
| From 50 years old  | 110   | 28.1           | 100.0                       |
| **Total**          | 390   | **100.0**      |                             |
| **3. Qualification** |       |                |                             |
| Bachelor Degree    | 70    | 17.8           | 17.8                        |
| Master Degree      | 66    | 17.0           | 34.8                        |
4. Research Results

4.1 Performing Exploratory Factor Analysis (EFA) of Human Resource Management

Test results KMO and Barlett's Test showed KMO = 0.875> 0.5 and Sig Barlett's Test = 0.00 <0.05. Thus, the sample size is suitable enough to conduct analyzing factors. The EFA results show that there are 8 factors extracted from 34 observed variables measuring the properties in
a group of managing activities and the observed variables with load coefficients bigger than 0.5 will be accepted. These 8 extracted factors 61,706% variance and named include: School information communication (TT); Arrangement and utilization of lecturers (BTSD); Working environment (MTLV); Remuneration and compensation policy (CSDN&TL); human resource development policy (CSD); Recruitment (TD); Training and development (DT&PT); School budget (NS). The results of the discovery factor analysis EFA are shown in the table below.

Table 3. The discovery factor analysis EFA

| The observed variables | Factors |
|------------------------|---------|
|                        | 1       | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
| TT1                    | 0.715   |     |     |     |     |     |     |     |
| TT2                    | 0.714   |     |     |     |     |     |     |     |
| TT3                    | 0.817   |     |     |     |     |     |     |     |
| TT4                    | 0.745   |     |     |     |     |     |     |     |
| BTSD1                  |         | 0.753 |     |     |     |     |     |     |
| BTSD2                  |         | 0.687 |     |     |     |     |     |     |
| BTSD3                  |         | 0.817 |     |     |     |     |     |     |
| BTSD4                  |         | 0.634 |     |     |     |     |     |     |
| MTLV1                  |         |     | 0.794 |     |     |     |     |     |
| MTLV2                  |         |     | 0.803 |     |     |     |     |     |
| MTLV3                  |         |     | 0.76  |     |     |     |     |     |
| MTLV4                  |         |     | 0.808 |     |     |     |     |     |
| MTLV5                  |         |     | 0.806 |     |     |     |     |     |
| CSDN&TL1               |         |     |     | 0.783 |     |     |     |     |
| CSDN&TL2               |         |     |     | 0.765 |     |     |     |     |
| CSDN&TL3               |         |     |     | 0.854 |     |     |     |     |
| CSPTNNL1               |         |     |     |     | 0.672 |     |     |     |
| CSPTNNL2               |         |     |     |     | 0.763 |     |     |     |
| CSPTNNL3               |         |     |     |     |     | 0.872 |     |     |
| CSPTNNL4               |         |     |     |     | 0.765 |     |     |     |
| CSPTNNL5               |         |     |     |     | 0.787 |     |     |     |
| TD1                    |         |     |     |     |     |     | 0.766 |     |
| TD2                    |         |     |     |     |     |     | 0.754 |     |
| TD3                    |         |     |     |     |     |     | 0.678 |     |
| TD4                    |         |     |     |     |     |     | 0.772 |     |
| DT&PT1                 |         |     |     |     |     |     |     | 0.782 |
| DT&PT2                 |         |     |     |     |     |     |     | 0.873 |
| DT&PT3                 |         |     |     |     |     |     |     | 0.768 |
| DT&PT4                 |         |     |     |     |     |     |     | 0.77  |
4.2 Test a Scale of Factors by Analyzing Cronbach’s Alpha Coefficients

The results of testing the scale of the factors by Cronbach's Alpha coefficients showed that all factors have Cronbach's Alpha coefficients are > 0.7 and observed variables in each factor have correlation coefficients with total variables > 0.5. Thus, the observed variables in the factors can be used and they represent the properties of those factors.

Table 4. Test scale

| Code      | The observed variables                                                                 | Total variables | Cronbach’s Alpha |
|-----------|---------------------------------------------------------------------------------------|-----------------|------------------|
| TT.       | Communication in the university.                                                      |                 |                  |
| Cronbach’s Alpha = 0.853                        |                 |                  |
| TT1       | Lecturers always get the information about HR in the university.                     | 0.747           | 0.790            |
| TT2       | Lecturers always get the information about developing of fields in the university.   | 0.725           | 0.800            |
| TT3       | Lecturers always get the information about improving science-tech.                    | 0.703           | 0.809            |
| TT4       | Lecturers are always answered questions about issues that exist in the school         | 0.607           | 0.847            |
| BTSD.     | Arrangement and utilization of lecturers                                              |                 |                  |
| Cronbach’s Alpha = 0.742                         |                 |                  |
| BTSDLNL1  | Arrangement and utilization the right expertise and capacity of lecturers             | 0.585           | 0.654            |
| BTSDLNL2  | The right arrangement creates conditions for lecturers to ask each other to improve their capacity. | 0.691           | 0.707            |
| BTSDLNL3  | Effective assignment ensures teachers' professional development.                     | 0.553           | 0.673            |
| BTSDLNL4  | Encourage lecturers to research in new, specialized fields.                           | 0.513           | 0.696            |
| MTLV.     | Working environment                                                                  |                 |                  |
### Cronbach’s Alpha = 0.797

| MTLV1   | The relationship between lecturers is friendly. | 0.545 | 0.769 |
|---------|------------------------------------------------|-------|-------|
| MTLV2   | Relationship between superiors and subordinates.| 0.636 | 0.740 |
| MTLV3   | Lecturers have access to a favorable academic environment. | 0.507 | 0.781 |
| MTLV4   | Lecturers have conditions to refer to research materials. | 0.652 | 0.734 |
| MTLV5   | Lecturers believe and love teaching. | 0.554 | 0.767 |

### CSDN&TL. Remuneration and compensation policy

**Cronbach’s Alpha = 0.902**

| CSDN&TL1 | Remuneration policy commensurate with work results. | 0.716 | 0.887 |
|----------|-----------------------------------------------------|-------|-------|
| CSDN&TL2 | Salary and incentive policies encourage to develop teaching. | 0.721 | 0.887 |
| CSDN&TL3 | Remuneration policy ensures all parts fairness. | 0.756 | 0.881 |

### CSPTNNL. Policy for developing human resources of lecturers

**Cronbach’s Alpha = 0.790**

| CSPTNNL1 | The university has a detail plan to develop human resources of faculty. | 0.545 | 0.769 |
|----------|------------------------------------------------------------------------|-------|-------|
| CSPTNNL2 | Training and management of human resource department of the university always goes with the plan. | 0.636 | 0.740 |
| CSPTNNL3 | The university always aims to increase the percentage of highly qualified faculty. | 0.507 | 0.781 |
| CSPTNNL4 | The university rules and regulations always afford favorable conditions for the next research lecturers. | 0.652 | 0.734 |
| CSPTNNL5 | The university's policy of developing human resources is increasingly fair. |       |       |

### TD. Recruitment

**Cronbach’s Alpha = 0.860**

| TD1     | Hiring standards are higher. | 0.597 | 0.844 |
|---------|------------------------------|-------|-------|
| TD2     | The university attracts quality lecturers. | 0.672 | 0.834 |
**TD3** Recruitment criteria are clear and specific.  

| TD4 | The recruitment process is scientific and objective. | 0.621 | 0.841 |

**DT&PT.** Training and development  
Cronbach’s Alpha = 0.879

| DT&PT1 | The university supports training costs. | 0.665 | 0.864 |
| DT&PT2 | The university supports research funding. | 0.714 | 0.853 |
| DT&PT3 | The university organizes training courses for lecturers. | 0.632 | 0.871 |
| DT&PT4 | Organize scientific conferences. | 0.822 | 0.829 |
| DT&PT5 | Exchange lecturers with domestic and foreign university. |  | |

**NS.** School budget  
Cronbach’s Alpha = 0.742

| NS1 | The university increasingly attaches importance to the budget for the development of human resources of faculty. | 0.585 | 0.654 |
| NS2 | School budgets are devoted to develop scientific and technical research. | 0.591 | 0.707 |
| NS3 | University development budget | 0.553 | 0.673 |
| NS4 | The school budget ensures the life of the faculty. |  | |

**Y.** Development HR of faculty in the university.  
Cronbach’s Alpha = 0.730

| PTNNL1 | Education level of higher educated lecturers. | 0.544 | 0.656 |
| PTNNL2 | The teaching ability of the lecturers has been improved. | 0.577 | 0.694 |
| PTNNL3 | The lecturers’s research ability is better. | 0.586 | 0.688 |
| PTNNL4 | Lecturers are more and more attached to their careers. | 0.578 | 0.637 |
| PTNNL5 | Lecturers are more responsible for teaching. | 0.665 | 0.864 |
| PTNNL6 | The number of lecturers increased. | 0.714 | 0.853 |

Source: Data processing results on SPSS software
4.3 Regression Equation of the Model

4.3.1 Results of the Model's Regression

Table 5. Regression results

| Model   | Unstandardized Coefficients | Standardized coefficient | Collinearity Statistics |
|---------|----------------------------|--------------------------|-------------------------|
|         | B   | Std. Error | Beta  | T   | Sig. | Tolerance | VIF  |
| 1       |     |            |       |     |      |           |      |
| (Constant) | 0,888 | 0,033 | 0,027 | 0,003 |       |           |      |
| TT      | 0,88 | 0,009 | 0,077 | 9,275 | 0,000 | 0,763 | 1,311 |
| BTSD    | 0,561 | 0,023 | 0,223 | 9,301 | 0,000 | 0,581 | 1,722 |
| MTLV    | 0,112 | 0,073 | 0,15  | 7,67  | 0,000 | 0,649 | 1,542 |
| CSDN&TL | 0,14  | 0,008 | 0,386 | 14,842 | 0,000 | 0,609 | 1,641 |
| CSPTNL  | 0,048 | 0,009 | 0,013 | 15,165 | 0,000 | 0,426 | 2,352 |
| TD      | 0,224 | 0,037 | 0,55  | 13,03 | 0,000 | 0,556 | 1,799 |
| DT&PT   | 0,164 | 0,012 | 0,402 | 4,211 | 0,000 | 0,654 | 1,528 |
| NS      | 0,077 | 0,013 | 0,215 | 17,396 | 0,000 | 0,670 | 1,493 |

Dependent variable: Y: Human resource development of non-public university faculty.

Source: Results processed on SPSS from author's survey data

The results of the Enter method shown in the table that show the accepted model with 8 factors affecting the development of non-public university faculty. The regression equation is written as follows:

\[
PTNNL = 0,888 + 0,08^* TT + 0,561^* BTSD + 0,112^* MTLV + 0,14^* CSDN&TL + 0,048^* CSPTNL + 0,224^* TD + 0,164^* DT&PT + 0,077^* NS
\]

Table 6. Summary regression model

| Model | R  | R² | Adjusted R² | Standard Error of the Estimate | DurbinWatson |
|-------|----|----|-------------|-------------------------------|--------------|
|       |    |    |             | F               | df1 | df2 | Sig. F |
| 1     | 0,842 | 0,71 | 0,700      | 548 | 70,616 | 6 | 250 | 0,00 | 2,085 |

a. Prediction: (Constant): TT, BTSD, MTLV, CSDN & TL, CSPTNL, TD, DT & PT, NS.
b. Dependent variable PTNNL.
4.3.2 Perform Tests of a Regression Function

Tests performed include:

- **Test the multi-collinearity phenomenon of the model.**

The results in Table 5 show that the VIF of the independent variables are all less than 10, so we can conclude that the model does not have multicollinearity.

- **Test the correlation and autocorrelation phenomenon of the independent variables.**

The results showed that the coefficient Durbin - Watson $\hat{n} = 2.085$. (see Table 6) it can be concluded that the model has no correlation and autocorrelation because according to Trong Hoang and Chu Nguyen Mong Ngoc (2005) in the case when n> 200 does not have a lookup table, it can be applied experimental inspection rules:

When the Durbin - Watson coefficient $0 \leq \hat{n} < 1$, there is a positive correlation.

When $\hat{n}$: $1 \leq \hat{n} \leq 3$, there is no correlation.

When $\hat{n}$: $3 \leq \hat{n} \leq 4$, there is an inverse correlation.

- **Verify the model's constant variance.**

In this study, the author uses the Spearman rank correlation test between normalized residuals and independent variables. If the Spearman correlation sig value between the normalized residue (ABSRES) and the independent variables is $> 0.05$, it can be concluded that no variance change occurs.

The test results show that all Spearman correlations between the normalized residuals (ABSRES) and the independent variables are $> 0.05$. See appendix.

- **Verifying the suitability of the model with the data set.**

The results of ANOVA analysis table show that sig of the model = 0.00, so the used model is completely consistent with the whole.

ANOVA Analysis Table

| Model  | Sum of Squires | Df | Mean Square | F   | Sig. |
|--------|---------------|----|-------------|-----|------|
| 1      | Regression    | 190,902 | 10 | 21,211 | 70,616 | 0.00 |
|        | Residual      | 78,098  | 250 | 0,300  |       |      |
|        | Total         | 269    | 256 |        |       |      |

Source: Data processing results on SPSS software

- **Test the standardized residue of the model**

Performing this test, the author uses P-P Plot diagram, the results show that the dots are concentrated in the form of a diagonal, thus assuming the normal distribution of the residual
is not violated. See appendix.

So, after performing the tests of linear regression, the test results are satisfactory, the model can be used. The model of the impact of managing activities on the development of non-public university faculty is shown:

Formal research model used:

- Communication in the university
- Arrangement and utilization of lecturers
- Working environment
- Remuneration and compensation policy
- Human resource development policy
- Recruitment
- Training and development
- School budget

Source: Suggestion from the author

5. Conclusion and Implications

5.1 Conclusion

From the regression results in table 5 shows that there are 8 important factors affecting the development of human resources faculty in the non-public university through such factors as: TT, TD, BTSD, MTLV, CSD & TL, CSDPT, NS. The level of impact of these 8 factors can be explained by 71% (R2 = 0.71) of the change of the agricultural development (Development of human resources of non-public university faculty).

All 8 factors have regression coefficients (+) (see table 5). This proves that all 8 factors have positive effects in the same direction with the dependent variable of Medicine (PTNNL), that means they have a positive impact on the development of faculty human resources of the university.
Based on the Beta coefficient (standardized regression coefficient), see Table 5, we know the strong influence of the factors on the variable agricultural development (Development of human resources of non-public university faculty), respectively: TD > DT&PT > CSDN&TL > BTSD > NS > MTLV > TT > CSPTNNL. The variable of TD has the strongest and CSPTNNL has the weakest impact.

Given the importance of these variables, managers should focus on variables ranked highly influenced because each change of them will lead to a large variation of the variable Y (PTNNL). In non-public universities, to develop faculty of lecturers, managers should first focus on recruitment (TD). This is completely consistent with the current situation of Vietnam, because most of the non-public universities want to have good lecturers, the most important issue is still the initial human resource collecting. This is decisive to the development of the university’s lecturers in the future.

5.2 Administrative Implications

Regression results of the model of factors affecting the development of human resources of non-public university faculty have suggested some of the following issues for managers:

Firstly, the development of faculty human resources of non-public universities is mainly based on the internal strengths of each university. This is different from public universities, the development of human resources of faculty mainly depends on the Own Department of the Government (the Ministry of Education and Training), and Government support (from policy, investment, finance, etc.).

Secondly, due to recruitment factor (TD) has the strongest influence on the development of human resources of faculty, non-public universities need to focus on doing well this work. To do this, university should step by step innovate and improve the criteria for recruiting staff to the university, ensuring the recruitment of qualified staff, capable of developing university lecturers. Need to complete the recruitment process, recruitment policy.

Thirdly, complete the training and development of the university's faculty because it is the most important factor deciding the development of faculty human resources in terms of quality, so non-public universities need to implement. Well, some of the following measures to improve the positivity and minimize the negative effects of this factor on the development of university faculty human resources. In order to do that, non-public universities need to renew training programs and training methods for young lecturers, and need to perfect policies on professional training for young lecturers.

Fourthly, improve the working environment for the faculty. There is also a factor that have an effect on the faculty development. Improved working environment includes: improving the relationship between superiors and subordinates; the relationship between lecturers; build a good academic environment to facilitate the ability of lecturers to develop their expertise;

Finally, the policy of remuneration and compensation for lecturers. This factor is also very important to attract high quality human resources from outside to university and keep talented
lecturers in the school. To improve this factor there are a number of issues to note:

- Improve the material and spiritual life of the lecturers

- Evaluation criteria for lecturers' performance should be specific, clear and transparent.

- Salary policy should be associated with the achievements of the lecturers.

In addition, it is necessary to have solutions to increase operating budget in non-public universities. The research results show that this factor also has a significant impact on the development of human resources of non-public university faculty. To increase the budget for the school there are some basic solutions such as:

- Developing scientific research services for production facilities to increase revenues for the university.

- Improving the quality of training to serve as a basis for tuition fees from learners.

- Expand types of training services to increase income for the university.

- Use financial resources effectively, cut unnecessary investments.

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