Motivational Analysis in Carrying Out Research: A Study of Medical Faculty Lecturer at Hang Tuah University

Gartinia Nurcholis
Hang Tuah University
gartinia.nurcholis@hangtuah.ac.id

Abstract. Research is one of the activities found on catalogues of higher education which is the basis for evaluating the performance of certain higher education. The problem of lecturer productivity in carrying out research is considered near to the ground. Less motivation is indicated as one of the factors leads minimum research productivity. The motivation of lecturers in carrying out research is shaped by two factors, namely hygiene factors and motivational factors. The former is a factor given by institution for the employee satisfaction or it is best known as external factors. The latter is a person’s psychological need to carry out the possible work and it is called as internal factors. The purpose of this study is to find out the description of hygiene factors and motivation factors that underlie lecturers in carrying out the research, so that a development plan can be prepared to increase the motivation of lecturers in conducting a research. There were 45 Medical Faculty lecturers of Hang Tuah University in Surabaya who were involved in this current research. Confirmatory factor analysis was employed in this study in which the percentage of descriptive analysis was as well as recruited. The results have shown that the motivation of lecturers in conducting the research are determined through the hygiene factors and motivational factors. The hygiene factors cover some areas, such as the existence of adequate quality supervision, sufficient salary, and demands of a requiring research. Meanwhile, the motivation factors embody the responsibility of the job, recognition, and self-development interest. Moreover, it is likely said that both hygiene and motivational factors create enthusiasm in conducting a research. There are also several new factors found in this research, namely the motivational policies, the development of personal competence, and rewarding and recognition environment.

Keywords: Hygiene, motivation, confirmatory factor analysis.

Introduction

A paradigm shift in the field of education which makes the demands of quality and world class Higher Education management is research-based (William & Van Dyke, 2008; Zhang, 2014). Universities that have a reputation as research-based academies are often indicated as good quality universities (Hu and Gill, 2000; Bloedel, 2001; Wichian, 2009). The quality of Higher Education has high competitiveness, is indicated by the standing of Higher Education which is determined based on the quantity and quality of the research results produced by the college. The quantity and quality of research results produced by universities, are influenced by the productivity of human resources contained therein, as a producer of research products in accordance with the competencies possessed (Zhang, 2014).

The studies from various universities show that research is important for the development of universities because by conducting research, it can improve the knowledge of the academic community, develop the ability to teach effectively through improving analytical thinking and communication skills. For the personal development of lecturers, it can increase the chances of higher promotion, and higher academic status (Lerputtarak, 2008). In terms of the benefits of this study, the productivity of lecturers in research each year is not only beneficial for the promotion of lecturers, but it can improve the reputation of universities and increase the ranking of universities. If the college has been widely known by the public, it will indirectly increase to enrol in the University, so that it can increase the University’s income (Zhang, 2014).

Hang Tuah University as one of the Universities in Surabaya has implemented a policy as a research-based University through internal and external research funding programs. However, the research funding program is not effectively enough to improve the productivity of medicine faculty lecturers in conducting research. Based on the data of research in the Medical Faculty of Hang Tuah University Surabaya from 2009 to 2014, the results show that there are 22,72% (22 person) of lecturers who conduct internal research, and only 1,13% (1 person) of lecturers who conduct external research. This situation is considered less after comparing to the number of lecturers, as many as 88 person To increase the productivity of lecturers of Medical Faculty of Hang tuah University, study of motivation analysis in carrying out research was conducted. that the number of research that have been conducted by the Faculty of Medicine lecturers is relatively low.

Literature Review

The importance of research
Research is a process of steps used to collect and analyse information so as to increase our understanding of a topic or issues. In general, a research contains of three steps:
proposing questions, collecting data, and presenting answers. In conducting a research, there are a lot of benefits obtained; (1) Upgrading knowledge. It means that research plays a vital role in addressing the issues. Through research, people discover new findings to answer questions, and gain deeper understanding of the problem; (2) Improving practice. A research suggests improvement through practice. A research also offers educators new ideas to consider as they go about their jobs. From reading research studies, educators can learn about new practices that have been existed before (Cresswell, 2012). The process of research are: (1) Identifying a research problem, (2) Reviewing the literature, (3) Specifying a purpose for research, (4) Collecting data, (5) Analyzing and interpreting the data, (6) Reporting and evaluating research (Cresswell, 2012).

The staff of higher education institutions are the key of research resource. Academic staff, for instance lecturers, have played an important role in achieving the objectives of the institution (Rowley; 1996); (Zhang, 2014). Generally, the major responsibilities of academic staff, for instance lecturer in the modern university are teaching (transmission of knowledge), research (advancement of knowledge) and community service (application of knowledge) (Perkins 1973; Marsh & Hattie 2002; Lerputtarak, 2008). The value hierarchy of responsibility of academic staff are research, followed by teaching and then community service (Brand 2000); (Lerputtarak, 2008). According to education regulation (2005) no. 4, article 1, chapter 3, it mentions that lecturers are professional teachers and scientists which the major responsibility is transforming, developing, and disseminating knowledge, technology and art through activities such teaching, research, and community service. Thus, in order to improve quality of life student, lecturers need to develop their teaching skills through research activities, knowledge, technology and art dissemination to the community. There are relationship between teaching and research. Rowland (1996); (Lerputtarak, 2018) have studied that from investigated the perception of faculty members about the relationship between teaching and research. He found that teaching and research should coexist in a synergistic balance within any department. Lecturers may engage in such research activities as developing question or interpreting data (Cresswell, 2012). It means, university lecturers should participate in both research and teaching as an essential part or their work, because the active involvement in the research process, directly improves the quality of teaching.

The performance of quality of the working staff is correlated to the motivation of the staff. In modern educational research, motivation has gradually attracted the attention of the educators. Therefore, most of this thesis is to be devoted to the theme of motivating staff in educational organizations (Zhang, 2014). Motivation is a force that serves three function. It energizes, or cause people to act; it directs behaviour toward the attainment of specific goals; and sustains the effort expended in reaching those goals (Steers & Potter; 1991; Riggio, 2009). Stoner (2012); (Zhang, 2014) argued that motivation is a human psychological characteristic that contributes to a person’s degree of commitment in organization. It is very important to enhancing performance and output of employee in organization. Promotion, for some scholars has a motivating effect on research productivity. For instance, Fox (1985); Chen, et.all (2010) suggests that higher education institutions can influence faculty research behavior through the manipulation of the reward structure for promotion. Other researchers, however, insist that faculty publish not for external rewards but because they enjoy the process of inquiry (McKeachie 1979). The prior studies have identified two categories of personal motivational factors that drive academic research: (1) investment factors or extrinsic rewards (e.g., salary raises, tenure, and promotion) and (2) consumption factors or intrinsic rewards (e.g., an individual’s personal satisfaction from solving research puzzles, contributing to the discipline, and achieving peer recognition.

Herzberg motivation theory
According Steers & Porter (1991), motivation is a force that serves three functions; It energizes, or cause people to act; it directs behaviour toward the attainment of specific goals; it sustains the effort expended in reaching those goals. Because motivation cannot be observed directly, it is very difficult to study. We can only infer motives either through observing goal-directed behaviour or by using some psychological measurement techniques. Herzberg (1966) has developed two theoretical factors. This theory is closely related to Maslow’s hierarchy of needs, but it relates more specifically to how individuals are motivated in work place. Based on his research, Herzberg has argued that meeting the lower - level needs (hygiene factors) of individuals will not motivate them to exert effort, but it will only prevent them from being dissatisfied. Only if higher - level needs (motivator factors) are found, the individuals will be motivated. The implication for managers of the motivator- hygiene theory is that meeting employee’s lower- level needs by improving salary, benefits, safety and other job contextual factors will prevent employees from becoming actively dissatisfied. Yet, these examples will not motivate them to exert additional efforts towards better performance. To motivate workers, according to the theory, managers must focus on changing the intrinsic nature and content of job by “enriching” them to increase employees’ autonomy and their opportunities to take an additional responsibility, gain recognition and develop their skills and careers. The content of Herzberg’s theory has widely been accepted as relevant in motivating employees to give off their best in organisations. Further research has proved that the employee is more motivated by intrinsic factors as captured in Herzberg’s motivator needs than anything else (Ghazi, Shahzada, et.all, 2013). Herzberg in his two factors theory states that motivation factors, such as intrinsic factors in work and hygiene factors as extrinsic factors of work. This motivational factors can only
produce job satisfaction, while hygiene factors play a role in reducing dissatisfaction (Herzberg, 1959); (Alshmenri, Maude, et all, 2017).

Riggi (1987), Yusuf, et all (2012) state that the theory of two factors can help managers or leaders in recognizing the factors that cause dissatisfaction in employees, by reviewing hygiene factors and improving these factors. Thus, dissatisfaction can be minimized or eliminated. If the manager found that employees’ motivation is low, manager can review motivational factors, correct them, so that satisfaction factors can be improved. For instance, an acceptable level of salary may not lead to satisfaction but less quantity may lead to dissatisfaction. This condition shows that those two factors have the same functions and do not overlap one to others. In this case, it does not avoid things that are not satisfied. Yet, it can simultaneously make employees satisfied. This situation only makes employees no longer feel dissatisfaction.

Based on a study conducted by Kosasih, Yusuf (2011), factors that influence lectures’ motivation to conduct a research at Singaperbangsa University are internal factors; the pleasure of doing research, a sense of responsibility in developing science, and the need to increase functional positions and external factors; institutional policies required lecturers to conduct research and the environment inspired lecturers in conducting a research.

Herzberg divides Research on resurrecting in two theoretical factors: An Implementation to the University teachers shows that the hygiene and motivator factors are both considered satisfactory by University Teacher in Pakistan. These findings are different from Herzberg’s (1959) which states that hygiene factor is a factor that makes employees dissatisfied or unmotivated. This research is in accordance with two researches conducted by Brenner et al (1971) and Maidani (1991). The researches also note that hygiene factors are also sources of job satisfaction which support the findings of Brenner et al (1971) and Maidani (1991) which states that hygiene factors can underlie job satisfaction (Ghazi, 2013).

**Method**

There were 45 medical faculty lecturers in Hang Tuah University recruited as research subjects. Measuring instrument used was the scale of motivation factor developed by researches in order to Herzberg theory (1959) are (1) Hygiene Factor Scale, and (2) Motivational Factor Scale. The Scale of hygiene and motivation were measured by using hygiene and motivation factor according to Herzberg factor theories. Hygiene factors consisted of reward, work condition, institution policy and administration, interpersonal relationship, and the quality of supervision. Meanwhile, motivational factors consisted of achievement, recognition, work responsibility, and personal development. The instrument design, both hygiene and motivation factor were 5 points Likert Scale format which ranged from 0 to 4 (0 = completely disagree; 1 = slightly disagree; 2 = neither agree nor disagree, 3 = slightly agree, 4 = completely agree). The data analysis technique was used to test the hypothesis which covered the percentage of descriptive analysis by using SPSS program 23.

**Result and Discussion**

The results of the study have shown that hygiene factors which motivate lecturers in conducting research in Medical Faculty at Hang Tuah University Surabaya are: (1) the existence of adequate quality supervision (0.93), (2) institution policy & administration (0.87), (3) Sufficient salary (0.79), (4) The demands of the work (0.76). Meanwhile, the motivational factors are: (1) work (0.87), (2) achievement (0.87), (3) self-development interest (0.79), (4) responsibility of the job (0.71), (5) recognition (0.59).

Based on the above data, it is clear that the highest contribution variable is the quality of supervision (0.93), and the lowest contribution variables is recognition (0.59). The quality of supervision means how the supervision provided by the institution on the productivity of lecturers’ research makes the motivation for the lecturers to conduct a research. The quality of supervision as external factor, perceived by lecturers as the highest motivational factors in carrying out research. It means that the lecturers are satisfied with the quality of supervision. The recognition as an internal factor is the lowest contribution variable, which means that recognition doesn’t make the lecturers are satisfy enough to motivate their selves in conducting a research.

These results are contradictory with Herzberg’s theory (1955) which states that the hygiene factors are factors that make a person dissatisfied at work, so that if these factors are removed, it doesn’t make the lecturer satisfied; while the motivational factor is a factor that makes a person satisfied in work, so that if the motivational factor is increased, it will make lecturer satisfied. Syahzada (2013) finds that hygiene factors are more dominant than motivational factors which are underlying the lecturers to conduct a research in Pakistan.

Another finding of this research are both hygiene and motivational factors have the same important roles in forming the motivation. These factors are grouped, then forming a new factor in which consist of hygiene and motivation factors. These factors are (1) Factor I: The policy which can motivate achievement, consist of the quality of supervision, institution policy and administration, and achievement. Factor I: The development competencies consist of work itself, responsibility, and self-development; (3) Factor III: Rewarding and recognition environment consists of salary, work condition, and recognition.
References

Alshemri, M, Shahwan-Akl, L, et.all. 2017. Herzberg Two Factor Theori. Life Science Journal. No 14. Volume 5. Available at http://www.lifesciencesite.com

Baah, Kwasi; Amoako, George. 2011. European Journal Of Business and Management. ISSN. 2222-1905 (Paper) ISSN. 2222-2839 (Online). Vol 3. No 9. 2011. Available at https://iiste.org/Journals/index.php/EJBM/article/download/642/535

Wichian, S, Wongwanich, S, Bowarnkitiwong, S. Factors Affecting Research Productivity of Faculty Members in Governers University. Lisrel and Network Analysis. 2009. Kasetsart Journal. Social Sience. Available at kasetsartjournal.ku.ac.th/kuj_files/2009/A0906251543307343.pdf.

Chen, Nixon, et.all. 2010. Research Productivity of Accounting Faculty. An Exploratory Studi. American Journal Bisnis of Education. Volume 3. No.2. Februari. 2010

Cresswel, John. Educational Research. Planning, Conducting, and Evaluating Quantitative and Qualitative Research. Fourth Edition. 2012. Pearson Evans, Obie, Martinez, Susan, et.all. 2010. Herzberg Two Theory Group Paper. MGMT 500.

Ghazi, Safdar, Shahzadam Gulap, et.all. 2013. Journal Of Educational and Social Research. Vol.3. No. 2. May. 2013. Available at: https://pdfs.semanticscholar.org/a49f/86fcea51dc67d89c1a5ae4401062b6ca4242.pdf

Kosasih, Yusuf. 2011. Analisis Motivasi Dosen dalam Melakukan Penelitian di Lingkungan Universitas Singaperbangsa Karawang. Majalah Ilmiah Solusi Uniska. ISSN 1412-86676. Volume 10. No cer 2. Edisi Februari 2011.

Lerputtarak, Sarunya. 2008. An Inverstigation of Factors Related to Research Productivity in A Public University in Thailand: A Case Study. A dissertation submitted in partial fulfilment of the requirements for the Degree of Doctor of Education, School of Education, Faculty of Arts, Education and Human Development, Victoria University, Melbourne, Australia.

Riggio. Ronald. E. 2009. Introduction to Organizational Psychology. Fifth Edition. Pearson Education International

Williams, H. A. 2003. A Mediated Hierarchical Regression Analysis of Factors Related to Research Productivity of Human Resource Development Postsecondary Faculty. Doctor of Philosophy in Vocational Education Dissertation. Louisiana State University. Available: http://etd.lsu.edu/docs/available/etd-0526103-212409

Zhang, Xinyang. Factors that Motivate Academic Staff to Conduct Research and Influence Research Productivity in Chinese Project 211 Universities. 2014. Thesis submitted in fulfilment of the requirements for the degree of professional doctorate in business administration at the University of Canberra, Australian Capital Territory, Australia

Riggio, Ronald. 2009. Introduction to Industrial/ Organizational Psychology. Fifth Edition. Pearson International Edition.

Kosasih, Yusuf, A. 2011. Analisis Motivasi Dosen Dalam Melakukan Penelitian di Lingkungan Universitas Singaperbangsa Karawang. Majalah Ilmiah Solusi Uniska ISSN 1412-86676 Vol. 10 No. 21 Ed. Des 2011 – Feb 2012. Available at https://www.unsika.ac.id/sites/default/files/upload/Analisis%20Motivasi%20Dosen%20dalam%20melakukan%20Penelitian%20di%20Unsika.pdf