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Factors Influencing Research Productivity among the Academic Staff: A Case Study at the University of Social Sciences and Humanities, Vietnam

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Abstract
Vietnamese universities expect faculty to become more effective not only in teaching but also in research coordinating activities. However, there are some obstacles to research productivity, thus causing a low level of research outcomes. This study aims to explore the impact of institutional factors as well as personal career development factors on the research productivity of academic staff at the University of Social Sciences and Humanities (Vietnam National University, Ho Chi Minh City). The analysis was conducted on a sample of 245 academic staff. Although respondents understood the importance of undertaking research and had a good attitude towards research, their research productivity was significantly affected by research experience, language barriers, and time spent on research. In addition, the research results clarified that the main factors that reduced the research productivity of academic staff were heavy teaching duties, lack of scholarly resources, and insufficient research funding. Furthermore, respondents emphasized that if they had better research funding, and regularly participated in academic meetings, they would have high research motivation which would ultimately increase their research productivity. The findings contribute to our understanding of research productivity in Vietnamese universities, which is useful for educational leaders.

Keywords*:* Research productivity, Research work, Academic staff, Vietnamese universities

1. Introduction

A university is a place where research is carried out to serve social roles and to disseminate knowledge through research results. Therefore, universities contribute to the development of the country, helping the country to participate in the global knowledge society. In the 2000s, Vietnamese higher education reformation had a dramatic effect on the missions and activities of universities, including the University of Social Sciences and Humanities, Vietnam National University Ho Chi Minh City (USSH-VNUHCMC). USSH-VNUHCMC is a top university in social sciences and humanities in Vietnam with 59 undergraduate education programs, 43 graduate programs, and 13 international affiliated programs. Its mission is to train highly qualified human resources for the modernization of the country and will become a top research university in social sciences and humanities in Asia by 2030. USSH-VNUHCMC administrators stated that research productivity is not only a means of disseminating knowledge but also a constitutive element of a

research university. In order to achieve USSH-VNUHCMC's mission, especially to design appropriate policy to enhance the research capacity of academic staff, the University's administrators need to identify the factors that motivate academic staff to carry out the research, as well as the factors that hinder them from engaging in research productively. As the concerns indicated, the current study aims to explore the factors affecting the research productivity of academic staff at USSH-VNUHCMC. Accordingly, the main research questions of this study are as follows.

RQ1. The impact of institutional factors on research productivity

RQ2. The impact of personal career development factors on research productivity

The structure of the current paper is: first, the context of USSH-VNUHCMC and a brief overview of related literature on research productivity are provided. Next, the methodology used in the study is clarified. Then, an analysis of collected data is presented, followed by a discussion explaining the important issues found in the study. Lastly, a conclusion is given.

2. Context Of The Study

As of June 2021, USSH-VNUHCMC has a staff of 901 people, of which 536 (59.5%) are lecturers and researchers, and 365 are administrative staff (40.5%). USSH-VNUHCMC has a student population of more than 15,000, including full-time undergraduate and postgraduate students annually. Out of the total number of lecturers and researchers, there are 248 Doctorates (47.2%), 276 Masters (52.6%), and only 1 lecturer has a Bachelor's degree (0.2%) (USSH-VNUHCM, 2021).

In June 2011, the Ministry of Education and Training and the Ministry of Internal Affairs issued Joint Circular No. 06/2011/TTLT-BNV-BGDDT specifying the number of working hours for academic staff based on academic rank as shown in Table 1 (Bộ Nội vụ & Bộ Giáo dục và Đào tạo, 2011).

Table 1. Number of working hours of academic staff in one year

Academic rank	Teaching	Research	Professional activities and services	Total
Lecturer	900 (51.14%)	400 (22.72%)	460 (26.14%)	1,760
Senior lecturer	900 (51.14%)	500 (28.41%)	360 (20.45%)	1,760
Superior lecturer	900 (51.14%)	600 (39.09%)	260 (14.77%)	1,760

Table 1 shows that teaching is the primary responsibility of academic staff at Vietnamese universities. In particular, all academic staff must spend at least 900 working hours on teaching activities in a year. Notably, the allocation of working hours for research is not the same among academic staff at different academic ranks. The higher the level of academic rank, the more research hours are allocated. However, the number of teaching hours is not representative of the

actual teaching hours of the academic staff. Instead, it shows how much time they spend on teaching-related tasks, including preparing lessons, giving lectures in class, being supervisors, and supervising students. These activities are then converted into "standard teaching hours." Academic staff need to perform enough standard teaching hours to receive the monthly basic salary. The University will pay for the extra working hours, if academic staff exceed the number of standard teaching hours allotted.

In preparation for the transition to a research university, USSH, VNU-HCM has made significant efforts to encourage academic staff to become more involved in research activities to increase their research productivity. Academic staff are required to produce at least one publication per year to fulfil their research responsibility. However, the research productivity of academic staff at USSH, VNU-HCM is still low (Table 2).

Table 2. Number of research works of academic staff at USSH-VNUHCM in 5 years (2016-2020)

Type of publications	Year					Total
	2016	2017	2018	2019	2020	
Textbook and monograph	40	43	23	32	49	187
Book chapter	2	4	5	4	5	20
Domestic refereed journal article	302	247	197	177	244	1167
International refereed journal article	61	55	59	68	101	344
National conference presentation	253	180	200	181	337	1151
International conference presentation	124	185	134	150	87	680

The data was provided by USSH-VNUHCMC's Department of External Relations and Research Affairs

According to Table 2, the number of articles published in domestic journals is much higher than in other types of publications. The numbers of articles in international journals are too low compared to USSH, VNU-HCM' missions. Therefore, to transform USSH, VNU-HCM into a research university by 2030, academic staff must actively increase the number of international publications, especially articles published in high-ranking journals.

3. Literature Review

3.1. Research productivity and its measurement

Print and Hattie (1997, P. 454) defined research productivity as "the totality of research performed by academics in universities and related contents within a given time period." Research productivity consists of research publications in conference proceedings and in professional journals, writing books or book chapters, collecting and analysing original evidence, working with graduate students on class projects and dissertations, performing editorial duties, seeking research grants, obtaining patents and licences, creating works of an artistic or creative nature, developing experimental designs (Raston, 1998; Kaya & Weber, 2003, Abramo & D'Angelo, 2014). Research productivity can be measured using qualitative and quantitative methods. The qualitative measures evaluate the impact of a publication by counting the number of citations it received from other works (Giuffrida, Abramo, & D'Angelo, 2019). Citation is an important measure of the popularity and quality of a publication (Creamer, 1998). However, citation counting has serious problems or limitations in that many researchers may contribute to a single paper. In this situation, the citation may not reflect how much credit each author is given for that paper. Moreover, a qualitative measure is always problematic because not all publications are indexed in research databases for citation and it is difficult to assess the real value of a publication (Brocato, 2001). For these reasons, quantitative measures have been used more widely than qualitative measures to measure research productivity (Lertputtarak, 2008). Quantitative measures focus on the total number of publications that researchers produce over a period of time (Abramo & D'Angelo, 2014).

3.2. Factors influencing the research productivity

There are many studies investigating research productivity, and several factors have been identified to be related to research productivity. The common factors can be divided into two main groups which are institutional factors and personal career development factors.

Institutional factors. The research university offers a full range of programs from Baccalaureate through graduate education to Doctorate and places a high priority on research (Middaugh, 2001). The fundamental task of a research university is to make knowledge creation and conduct scientific research, so the faculty has to move from teaching-intensive to research-intensive (Brew, 2006). Blackburn and co-authors (1991) reported the advantages of a research environment where faculty members can get support from their colleagues and collaborate with each other. Notably, a high ratio of graduate students to faculty has a positive impact on research productivity (Dundar & Lewis, 1998). In addition, there is a high correlation between research productivity and organizational resources such as library resources, research equipment, and research funds (Teodorescu, 2000).

Personal career development factors. It has been found that research interest is the best predictor of research productivity (Noser et al., 1996). Sulo and co-authors (2012) examined the factors causing low levels of research outputs in universities in Kenya. They reported that education level had the biggest impact on lecturers' research productivity. Chen et al. (2006) found that reward structure and promotion stimulated the work performance of academic staff, including research

productivity. Besides, research productivity was influenced by the time spent conducting research. Several studies demonstrated that the more time spent on research, the higher the research productivity of academics is (Williams, 2003; Bentley & Kyvik, **2012).**

In Vietnam, the research productivity of academic staff was low. Hayden and Thiep (2010) stated that only a few academic staff are interested in research, while many of them still focus on teaching. In addition, Vietnamese scholars published more research papers in domestic journals than in internationally peer-reviewed journals because of differences in academic standards (Pham & Hayden, 2019).

In summary, previous studies have examined common factors affecting the research productivity of academic staff at universities worldwide, mostly in the West. Only a few studies on this matter in Vietnam have been found. Although USSH- USSH, VNU-HCM's administrators have noticed low research productivity of its faculty and want to increase it, so far there is no research has been conducted directly to the University on this issue. As a member of the USSH, VNU-HCM, we have a duty to support the University's administrators in designing and implementing research policies to improve the research productivity of academic staff. Based on the mentioned reasons, the current study has been undertaken.

4. Methodology

A quantitative survey was applied as the primary source of information collected through a questionnaire. The participants in this study were academic staff at USSH- USSH, VNU-HCM. They are the full-time staff responsible for academic activities such as teaching and research, along with administration. This study is limited to two groups of determining factors for research productivity, including institutional factors and personal career development factors. These factors were repeated in the questionnaire to collect research data. The 5-point Likert scale was applied to the questionnaire. In addition, there were open-ended questions in the questionnaire to gain greater insight into the research productivity of academic staff. Respondents' opinions were extracted and quoted for explaining the data obtained from the survey. Two professors familiar with academic research productivity were invited to test the questionnaire for consistency and validity. A pre-test was conducted among 30 lecturers to clarify any problems regarding the questionnaire's content and structure. The online questionnaire was created using Google Forms, then e-mailed to academic staff in March 2022. After 3 months (from March 01, 2022 to June 01, 2022), there were 245 valid questionnaires were returned, representing 54,4% of the target population.

5. Data Presentation

5.1. Respondents' characteristics

Respondents to the questionnaire were requested to clarify demographics and job-related characteristics such as sex, academic rank, and main job duty. The results are shown in Table 3.

Table 3. Personal characteristics of survey respondents

Variable		Frequency	Percentage % (n=245)
Sex	Male	98	**40**
	Female	147	**60**
Academic rank	Lecturer	169	**69**
	Senior lecturer	47	**19.2**
	Superior lecturer	29	**11.8**
Educational qualification	Master degree	119	**48.6**
	Doctorate degree	126	**51.4**
Main job duty	Totally doing teaching	162	**66.1**
	Mainly doing teaching and some management tasks at the department level	70	**28.6**
	Mainly doing administrative tasks at the university level and some teaching work	13	**5.3**

As shown in Table 3, more than half of the academic staff participating in the survey were female (60%), while 40% were male. It was noted that 69% were lecturers, 19.2% were senior lecturers, and 11.8% were superior lecturers. The number of respondents who hold a doctorate degree was 51.4%. Furthermore, the respondents' composition regarding the main current job was: 66.1% were totally doing the teaching, 28.6% were mainly doing teaching and some management tasks at the department level, and 5.3% were mainly doing administrative tasks at the university level and doing some teaching work.

5.2. Respondent rating of institutional factors

The questionnaire survey was used to measure respondents' perceptions regarding institutional factors. Specifically, institutional factors were divided into five groups, including university regulations on research activities, support from colleagues and collaborators, library information resources and services, research infrastructure and equipment, research funding and reward system. The survey results reflected in Figure 1 clearly show the impact of each group on the research productivity.

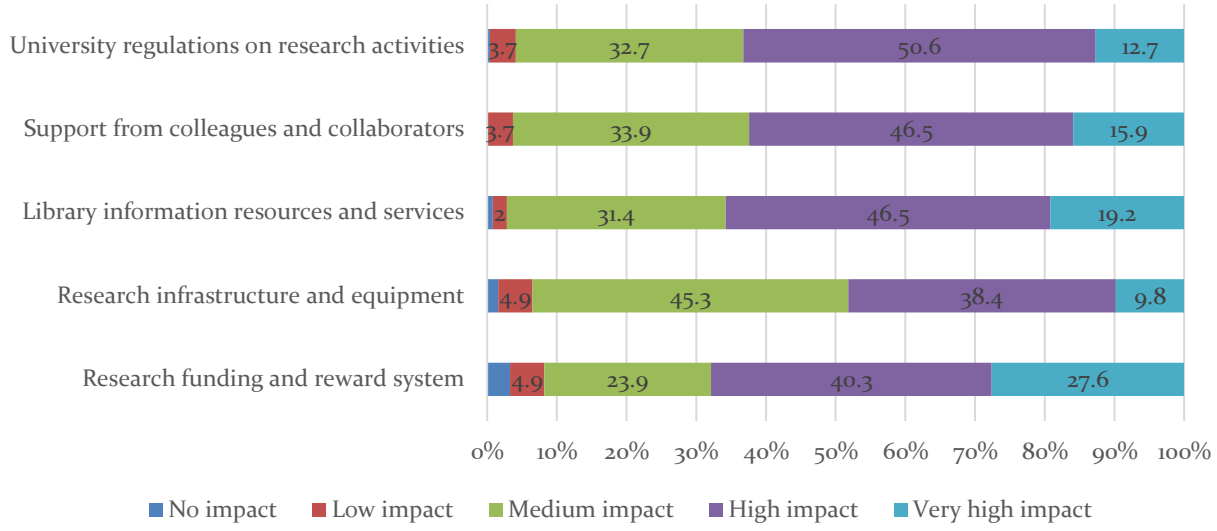

Figure 1. The impact scales of institutional factors

Figure 1 shows that institutional factors have a high impact. Firstly, university regulations on research activities were rated as "high impact" by about half of the respondents (50.6%). As mentioned above, teaching and research are mandatory for academic staff at USSH, VNU-HCM. They much have at least one publication a year to fulfil their research responsibility.

Secondly, most respondents found the impact of support from colleagues and collaborators. The rating was 46.5% "high impact" and 15.9% "very high impact." The responses reflected those respondents recognized the importance of collaboration in research as a means of transmitting research motivation to all teaching staff, especially those with little research experience. "*As a younger scholar, I really need advice from experienced researchers to improve my research skills. Their publishing outcomes also motivate me,"* they said. Notably, professional meetings have provided significant support within the University. Professional meetings offer a good opportunity for academic staff to discuss research issues, develop ideas, and learn from each other. However, respondents said that these activities were rarely organized. As one respondent commented, for example: *"Seminars to share research experiences are necessary. Unfortunately, they are rarely organized*" <...> "*The University should organize regular academic meetings which especially focus on research-related topics, not administration."* Some respondents further informed us that support from colleagues and collaborators during their participation in conferences and seminars helped them develop research skills and knowledge.

Thirdly, respondents were asked if they thought library information resources and services affected their research productivity. As expected, Figure 1 shows support from the library has a high impact, with a rating of 46.5% as "high impact" and 19.2% as "very high impact." USSH, VNU-HCM's library does not have enough good and updated information resources for research. Besides, respondents emphasized the need of having full-text access to academic journals. Respondents were especially detailed in their remarks:

> *A large number of library materials are now out of date, so it is difficult to develop research topics.*

The University's library only has access to a very limited number of databases. We can't even access domestic journals. Unavailable scholarly databases negatively affect our research productivity.

Fourthly, research infrastructure and equipment were measured as "medium impact" by the majority of respondents in total (45.3%), and 38.4% of respondents rated these factors as "high impact."

Fifthly, research funding and reward systems are among the most important factors that motivate academic staff to participate in research, with 67.9% rating them as either "high impact" or "very high impact." Most of the respondents reported that research funding and reward provided by USSH, VNU-HCM was too small to motivate them to conduct research. In particular, they explained as follows:

The University provides a very small amount of research funding so I do not have the motivation to do research.

Research funding of VND 20 million (USD $850) for a research project at the university level is not enough. I do not want to apply.

The University offer cash rewards from VND 10 million (USD $430) to VND 30 million (USD $1300) for papers published in journals indexed by ISI or Scopus. These amounts are still small. I hope the cash reward per publication will be increased to assure high research motivation.

Generally, among institutional factors, research funding and reward system had the highest impact on the research productivity of academic staff at USSH, VNU-HCM while research infrastructure and facilities had the least impact.

5.3. Respondent rating of personal career development factors

Personal career development factors are the elements that come from the academic and personal qualifications of academic staff themselves. They are educational qualifications, research experience, personal abilities and interests, attitudes toward conducting research, time spent on research, rank and tenure status. Respondents were asked how they rated the impact of personal career development factors on research productivity from "no impact" to "very high impact." Figure 2 illustrates the responses received.

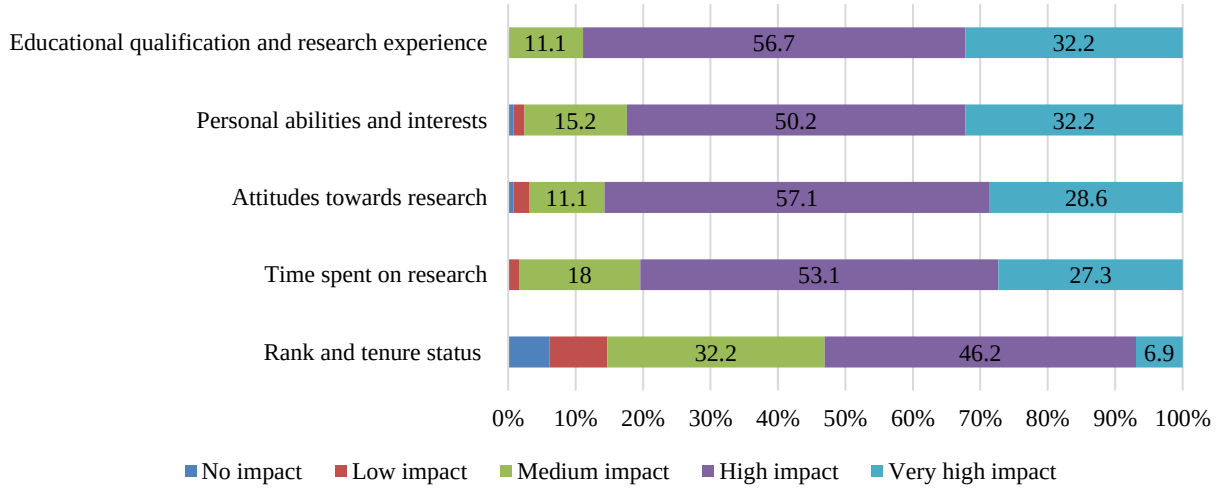

Figure 2. The impact scales of personal career development factors

As shown in Figure 2, the responses were overwhelmingly positive regarding education level and research experience, with a rating of 56.7% as "high impact" and 32.2% as "very high impact." Some respondents associated the lack of experience in conducting research with low levels of research productivity. They opined that the lack of confidence in writing in English was a limitation in publishing in international journals. Representative comments are as follows:

> *I am a new lecturer and do not have much research experience. Thus, I often submit my papers to domestic journals because there is no language barrier and their standards are not high as international peer-reviewed journals.*
>
> *English is an obstacle. It is difficult to publish in international journals, especially international peer-reviewed journals that require higher quality.*

Next, the survey results also show that respondents agreed with the impact of personal abilities and interests on research productivity, with 82.4% rating it as either "high impact" or "very high impact." Respondents are generally interested in research. One respondent gave a personal example, saying: "Doing research is important. It helps me update my knowledge and improve the quality of teaching."

Many respondents thought attitudes towards research had a large impact on their research productivity with 57.1% as "high impact" and 28.8% as "very high impact." Likewise, time devoted to research also affected the research productivity of academic staff. The rating was 53.1% as "high impact" and 27.3% as "very high impact." Balancing teaching and research seem to be a difficult task for academic staff. The survey results showed that academic staff spent too much time on teaching and related activities. It is not surprising therefore that they did not have enough time for research. For example, respondents complained:

> *I was busy with teaching and did not find sufficient available time for research as expected.*
>
> *I need to teach many classes from undergraduate to graduate level, so I work really hard to prepare the lectures.*

Research results also found that rank and tenure status were directly related to research productivity. Respondents acknowledged the importance of the role being played by research publications in academic promotion decisions. As one participant reported: *"My motivation for research is to achieve academic recognition because publications in international peer-reviewed journals are required for promotion to associate professor and professor."*

In short, when all personal career development factors are compared, education level and research experience had the highest impact on research outcomes at USSH-VNUHCM.

6. Discussion

6.1. Institutional factors' impact on the research productivity (RQ1)

According to USSH-VNUHCM's policy, doing research has become a mandatory function that academic staff must perform, along with teaching and administrative duties. In the last few years, the University has tried solutions to transform the role of academic staff from teaching-focused to research-oriented. This study found that the current low research productivity level of academic staff is because they have had heavy teaching workloads. Good support from colleagues is really necessary as it can increase research motivation. Receiving help, advice and support from senior colleagues will improve the research skills as well as the self-research effectiveness of junior academics. The comments above indicate that teaching staff have recognized the importance of professional meetings if they are well organized and regular. It is clear that when academic staff participate in professional meetings, they enhance their research skills and knowledge by learning from others.

The need for scholarly resources such as books, chapters in books, journal articles, conference proceedings, datasets, etc. continues to grow. However, respondents observed that the University's library did not satisfy their research demands because of limited resources. They revealed a lack of scholarly resources, especially international refereed journals, reduced research productivity. Respondents emphasized the need of having reasonable access to academic journals to update their knowledge and to keep up with the latest research findings. According to the survey results, respondents recognized the importance of scholarly resources for their research. It is expected that if the University's library provides sufficient scholarly resources for academic staff, then they will be more motivated to undertake research.

Moreover, the University's research policy was not good to encourage academic staff in doing more research. USSH-VNUHCM did not provide enough funding to carry out a research project, attend research conferences and pay publication fees (if required). Respondents were not satisfied with the reward system for research outcomes as well. It appears that if the research policy is revised to support scholars well in terms of funding and reward, USSH-VNUHCM would be able to expect academic staff to improve their research productivity.

6.2. Personal career development factors' impact on research productivity (RQ2)

The survey results found that personal career development factors have significant influences on the research productivity of academic staff at USSH-VNUHCM. According to responses, there is a

significant impact on research productivity by the level of research experience. In addition, respondents faced a language problem that obstructed them when trying to publish manuscripts in international journals.

Notably, academic staff with a high level of research productivity often have a positive attitude and interest in research activities. Besides, higher research productivity is generally positively associated with time spent on research. Our research results confirm the findings of a previous study showing that the number of hours spent in research activities is one of the most important factors in predicting research productivity (Webber, 2011). The maximum number of working hours per week in Vietnam is 40 hours, academic staff must be balanced between activities of teaching, research and administration (if any). Actually, the engagement of academic staff in research activities is not only for improving their disciplinary knowledge but also for getting external rewards such as promotion. By making the link between research productivity and promotion clear in the minds of staff, the University can effectively encourage them to do research and help them advance in their careers.

7. Conclusion

The study explored the factors affecting the research productivity of academic staff at the University of Social Sciences and Humanities, Vietnam National University Ho Chi Minh City (USSH-VNUHCM). The survey results show difficulties and challenges for academic staff in doing research and improving research productivity in the context of a heavy teaching workload, inadequate scholarly resources, and limited research funding. This study also found that the current low level of research productivity of academic staff is due to the lack of research experience, lack of time, and language difficulties. The findings can help the leaders of USSH-VNUHCM to redesign teaching and research policy as well as to provide sufficient support for academic staff in terms of resources and professional development. If these issues are well and timely improved, the research productivity of USSH-VNUHCM's staff will be significantly increased. Therefore, further study of research productivity should be continued with a more tailored action plan, in which step-by-step problem identification and resolution are carried out.

Declaration of Conflict of Interests

The author(s) declared no potential conflicts of interest.

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