Affordances, barriers, and motivations: engagement in research activity by academics at the research-oriented university in Vietnam

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ABSTRACT
The importance of academics undertaking research and publishing their research results is emphasised by universities. Engagement in research is recognised as an effective means to increase a university’s profile. This study applied a qualitative approach to explore affordances, barriers, and motivations towards the engagement in research experienced by academics at one of the leading universities in Vietnam. Nineteen semi-structured interviews were conducted with academics whose academic rank, discipline, qualification, age, and gender are different. A thematic analysis of the data discovered four institutional factors hindering the engagement in research of academics: financial support for research activities (affordance); teaching load (barrier); research collaboration (motivation); and research policy settings and practices (motivation). The findings revealed that a majority of the respondents were aware of the importance of research but their research productivity is still low because of problems related to such institutional factors. The findings are useful in assisting leaders of the investigated university to understand the research motivation of its academics as well as ascertain barriers to which academics are facing that can be overcome through intervention. Such understanding helps them to improve the policy for research across this university which is predicted to enhance the research productivity of all academics.

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The Higher Education (HE) sector has become more complex and multi-layered in past decades, with not only exponential growth in discipline knowledge but also increasing pressure from society regarding research productivity of academics as knowledge contribution. Universities are professional places where training provides highly skilled and specialised labour forces to assist the development of a knowledge-based economy of a country. Academics implicitly and explicitly contribute values to national education, economic growth and potentially to societal well-being through their two important activities: teaching and research. Along with teaching, research has been significantly
emphasised as a compulsory pursuit of academics at most universities, particularly at research universities (Altbach, 2014; Brew, 2003). Arimoto (2014) said that ‘an academic is thought to be a researcher and teacher at the same time in the modern university, and this categorization is widely accepted’ (p. 19). The research productivity of academics is predicted not only to advance knowledge in differing discipline fields but also to improve teaching effectiveness and enhance student learning outcomes (Scott, 2004). Such improvement increases academic reputation and standing of universities in the world’s ranking systems, such as the Times HE (Ramsden, 1998). As such, academics are encouraged or even at times pressured to actively engage in research activities and increase their research productivity, particularly through publication.

This study aimed to explore institutional factors that influence the engagement in research of academics at a public university in Vietnam, which was named the Research-Oriented University (ROU) for the purposes of this research. Since 2005, ROU has been striving towards increasing the research productivity of its academics in order to transition to a research university status by 2020 as desired of the Government of Vietnam (GoV) and the global trend in HE. The university leaders of ROU indicated that engagement in research which produces research outputs is critically important to academics, especially of those who are working for research-oriented universities1 like ROU (ROU, 2011). However, it is apparent that ROU academics have experienced a low sense of engagement in research, which has consequently resulted in limited research outputs across the university. According to the Deputy Director of the Office for Research at ROU, only 30–35% of ROU academics engage in research which generates research publications (Nguyen, 2011). As ROU is traditionally a teaching focused institution, it is evident that the academic identity of its academics is still firmly perceived as teacher and not researcher. The context of Vietnam Higher Education (VHE) and ROU is presented in the next two sections which are followed by a literature review, research methodology, findings, discussions, and conclusions.

The context of VHE

In 1986, Vietnam made an economic reform in order to pursue its far-reaching goals of industrialisation and modernisation. The reform commonly referred to as Doi Moi brought changes for VHE. Student enrolment increased dramatically from 162,000 in 1992–1993 to 2,204,313 in 2011–2012. Accordingly, the number of colleges and universities increased from 100 in 1992–1993 to 419 in 2011–2012 (Bộ Giáo dục và Đào tạo, 2012). Then, the number of academics also increased, especially those who have a postgraduate qualification. It was also noted that in the VHE sector, 9562 academics had a Doctoral degree and 39,002 held a Master’s degree (Bộ Giáo dục và Đào tạo, 2013). Despite such a large number of highly qualified academics, the research productivity of academics in Vietnam is deemed significantly low, when compared to academics in other Asian countries such as Singapore, Thailand, and Malaysia because a majority of academics in Vietnam are teaching-focused (Hayden & Thiep, 2010; Thomson, 2012). This is because almost all colleges and universities in Vietnam are currently teaching-intensive. In order to review and improve the quality of the VHE system, with a special focus on an increasing academics’ research productivity, the GoV started the Higher Education Reform Agenda (HERA) in 2005. An integral part of this educational reform is the intention to improve
research productivity of academics in order to increase the ranking of Vietnamese universities in Southeast Asia and globally by 2020. Fourteen universities of Vietnam, including ROU, have been selected to become key universities of Vietnam which will have intensive research and high research publications by 2020. Following the initiative of the HERA in 2005, the Prime Minister of Vietnam issued a decision number 145/2006/QĐ-TTg on the policy and main directions in the building of several international standard universities in Vietnam in which ROU is one of the selected universities to be developed to a research university (Thủ tướng Chính phủ, 2006). These policies were in place to support the transition of some key universities from teaching institutions to research institutions by 2020 despite most public universities still having financial constraints in the operation of supporting research activities of the institution in particular. The intention of the GoV in building excellent universities which meet international standards in providing highly qualified training and leading research in Vietnam is reasonable in the context of world HE in the twenty-first century. It is expected by GoV that such research universities must have good ability to compete with other universities in the South East Asian region and the World by 2020.

The context of the ROU

The ROU is one of the three regional universities of Vietnam. It was established in 1994 when several colleges and universities previously located in the city of X2 were merged together to establish one multidisciplinary university as it is today. Six colleges and one faculty of ROU are collectively located in the city of X while its newly-established branch is located separately in another city. As of June 2013, ROU has 1449 academics in which there are only 3 professors3 and 42 associate professors. Regarding the number of academics by qualification, only 229 staff (15.8%) obtained a doctoral degree while 842 people (56.87%) and 396 people (27.33%) obtained a master’s and bachelor degrees, respectively.

In recent years, in accordance with the national reform agenda (HERA) which emphasises the role of academic research, ROU has been attempting to achieve its strategic goal to become a research university by 2020. The goal is considered commensurate with the Decision 145 issued in 2006 of the Prime Minister of Vietnam in building excellent universities of Vietnam. More importantly, the goal is supported by the first-ever Law of HE of Vietnam which emphasises the research role of academics in universities and confirms that the development of research universities is an obvious trend of VHE to meet the demand of globalisation, industrialisation, and modernisation (Quốc Hội, 2013). Being a public university, ROU also has some financial constraints as others but such government document comes in place to support for the transition of ROU’s model from a teaching university to a research one by 2020. The University is desired to play a leading role in teaching and research to meet the demands of social and economic development of the Central and Highland region of Vietnam.

In order to achieve its goals by 2020, ROU has been endeavouring to raise academics’ awareness about the importance of research. Specifically, all academics are requested to engage with research activities that would increase their research productivity. In this study, research productivity refers to both publications such as journal articles, books chapters, books, and research projects. Although ROU envisages academics to engage

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in research, the information regarding the allocation of workload of academics shows that most of the time of academics is allocated to teaching. The number of working hours for academics per year is divided in three areas of responsibility: teaching, research, and administration depending on academic rank as in Table 1.

This information shows the same number of teaching hours for academics of all ranks, but the differences in hours allotted for research. It is noted that the number of working hours for teaching (900 hours/year) does not represent the actual teaching hours that academics teach. Rather, it represents the amount of time academics spend on all activities related to teaching, such as preparing lessons, delivering lectures in classes, and marking papers. All such activities are converted to the ‘standard teaching hours’ as in Table 2.

Academics are required to perform a standard number of teaching hours in order to receive a basic monthly salary. If the number of standard teaching hours is over their allocation, academics will be paid for these extra hours. The more they teach, the more they earn. This mechanism of remuneration is problematic as it encourages academics to teach many hours in order to earn more at the expense of neglecting research activities.

Regarding the allocation of research hours, the higher the academic rank is, the more hours allocated for research. The research hours are the number of hours that academics must spend on research activities in order to produce research outputs, particularly publications. It is understood that not all research work leads to publication but ROU academics are expected to produce tangible outputs such as referred journal articles, book chapters, books, and research projects. Other research undertakings, such as supervising student research, examining theses, and attending thesis defence presentations, are also counted and converted into research credit (for example, reviewing a manuscript is counted for 5 hours of research, supervising an undergraduate student to do a research project is counted for 50 hours of research, publishing a paper on a national refereed journal of Vietnam is normally counted for 300 hours of research (depend on the type and prestige of specific journals), publishing a paper on an international refereed journal which is indexed in prestigious research databases such as Thomson Reuters or Scopus is counted for 600 hours of research). All research activities are counted and converted into research hours for a year of each academic, comparing with the standard number of research hours for each academic rank as mentioned in Table 1. In 2011, ROU issued a Resolution number 60-NQCD/ĐU, dated 4 August 2011, which emphasised the importance of research and development, and the need to increase the research productivity of academics. It particularly emphasised an increase of the number of journal articles published on international prestigious journals which is expected to improve the research ranking of the university.

Table 1. Working hours of academics in an academic year.

| Academic rank      | Teaching | Research | Administration | Total |
|--------------------|----------|----------|----------------|-------|
| Lecturer           | 900      | 400      | 460            | 1760  |
|                    | (51.14%) | (22.72%) | (26.14%)       |       |
| Senior lecturer    | 900      | 500      | 360            | 1760  |
|                    | (51.14%) | (28.41%) | (20.45%)       |       |
| Superior lecturer  | 900      | 600      | 260            | 1760  |
|                    | (51.14%) | (39.09%) | (14.77%)       |       |

Source: Bộ Nội vụ & Bộ Giáo dục và Đào tạo (2011).
Based on 8 working hours/a day, 5 days/a week, 44 academic weeks/an academic year.
Nowadays, academic research has been increasingly emphasised at most universities around the world (Brew & Lucas, 2009). As such, there has been a continuing trend of establishing research universities in developed countries that has spread to developing countries. Globally, research universities are thought to significantly train intellectual labour forces for society, to create new knowledge, and to promote economic development of countries. Therefore, they play a crucial role in the development of countries in every aspect of society, such as education, economics, and technology. Research has thus become a vital function of academics and research productivity has been a compulsory measure for hiring, maintaining tenure, acquiring promotions, and salary increases (Chen, Gupta, & Hoshower, 2006; King, 2004; Read, Rama, & Raghunandan, 1998). Academics are required to publish research results nationally and internationally on refereed journals.

In recent decades, a great diversity of research has explored the factors that influence the research behaviours and research productivity of academics. As most of these studies were conducted in developed countries and several developing countries that have high-ranking research universities, Vietnam has not been included. Furthermore, no general model exists that can predict or explain research productivity of academics among the countries studied because of differences in context and culture. The following section will review the six common institutional factors which are (a) teaching load and time spent for research, (b) peer support, (c) research collaboration, (d) promotion, (e) research funding, and (f) reward policy, that have been considered significant influences on research productivity of academics. They are presented in no particular order.

Teaching load and time spent for research are well claimed to correlate with research productivity. Participants in one study reported that ‘We are so overloaded with administrative work and marking that there is little time left over for truly intellectually stimulating work’ (Bexley, James, & Arkoudis, 2011, p. 34). Levitan and Ray (1992), claimed it is important that academics reduce teaching time, and increase time spent for research activities. Research time should be the time spent for pro-research behaviours such as discussing with colleagues, reviewing a manuscript of a colleague; or for research behaviours such as writing a manuscript or working with colleagues and postgraduate students in a research project. All of these behaviours are predicted to have a direct link to research outputs (Sadler, 1999). Teodorescu (2000) found a positive relationship between sufficient time allocated to research and recent refereed articles of academics. This finding supports Blackburn and Lawrence’s (1995) conclusion that when teaching loads increase, research load and subsequent productivity will decrease.

Peer support is considered an effective form of mentoring in research. It occurs between colleagues, typically between the experienced and the novice, in relation to

| Table 2. Standard teaching hours in an academic year. | Standard teaching hours per year (two semesters) |
|-----------------------------------------------|-----------------------------------------------|
| Lecturer                                      | 280                                           |
| Senior lecturer                               | 300                                           |
| Superior lecturer                             | 320                                           |

One standard teaching hour = 45 minutes teaching in class.
research activities. Peer support creates a good collaborative research climate within a department or university, which motivates academics to become more involved in research (Raston, 1998). A previous study also found that scholarly success is very much enhanced when a researcher is helped by a mentor (Hunter & Kuh, 1987). The findings show the importance of peer support because it helps not only junior academics, but also senior staff to improve research skills, research capability, and research productivity. Consequently, Kyvik (1995) valued peer support and considered all kinds of support between colleagues as an intellectual synergy.

Research collaboration which involves in building a relationship in research matters, maintaining the relationship with colleagues, and using it for achieving research goals has proved to be a useful way of enhancing research productivity. According to Wolff and Moser (2009) and White, James, Burke, and Allen (2012), collaboration occurs between colleagues in different ways, such as being co-author in a publication, or working together in a research team. This can easily take place in an environment where academics have the same research interests, knowledge, and shared goals and values. It is emphasised that collaboration should frequently and intensively occur in order to maintain research motivation among colleagues (Bland & Ruffin, 1992; Creswell, 1986). Regular collaborations create a supportive culture of research among staff. This culture gradually leads to greater success and higher productivity in research outputs.

Promotion is an important criterion for increasing research productivity. Tien and Blackburn (1996) examined the impacts of a ranking system on research attitudes and research behaviours of academics and found that an academic rank can be viewed as a reward; they note, ‘… as a reward, promotion has the greatest motivating effect when it is contingent upon performance’ (Tien & Blackburn, 1996, p. 5). Therefore, some academics remain in the same position for a long time since they do not have any publications (Sulo, Kendagor, Kosgei, Tuitoek, & Chelangat, 2012).

Research funding is ‘essential … for enhancing [the] research productivity of scientists’ (Babu & Singh, 1998, p. 318). It becomes more necessary for researchers in technological and natural sciences fields where regular research experiments are carried out on expensive equipment. This can explain why research output of scientists in developed countries is normally higher than that of their counterparts in developing countries (Irvine & Martin, 1985). Webber (2011) emphasised that small changes in research funding can create a large variation in the research productivity of academics, and that universities which allocate more research funding to academics often exhibit significant effects on both the quantity and quality of their publications. Research funding can also be used for equipping libraries with resources, such as scientific journals and books – especially international refereed journals – in order to increase the opportunities for academics to access updated literature in the field.

Initiating a reward policy for research achievements encourages research productivity. Using the investment-motivated model of scientific productivity to investigate the motivation to research of academics, Levin and Stephan (1991) found that a large number of academics are actively involved in research because of the financial rewards associated with the activities, such as salary increases. Furthermore, Chen et al. (2006) discovered that financial research support has significant impacts on research productivity of academics. In relation to salary increases, accounting participants in Levitan and Ray (1992) study revealed that research output is a vital factor in determining their salaries increase.
at their universities. Consequently, many academics have low research productivity in the early period of their tenure, but their research productivity suddenly increases when they approach a new level of salary, or are promoted to a higher rank because they will get more financial benefits from this.

The above-mentioned institutional factors are among the significant factors that can be used to predict research productivity of academics. The influence of each factor on research productivity of academics may be varied depending on the particular context of a university. It is assumed that they have some close interrelationships to each other in contributing to research productivity. Jonker and Hicks (2014) have emphasised that

The more we understand about how faculty members discharge the obligations expected of them, the more we can do to create conditions and practices that permit faculty members to do their best work and for institutions and systems to operate at the most effective levels. (p. 3)

Therefore, these institutional factors guide the research question of this study in order to find the factors that influence the engagement of ROU academics in research.

**Methods**

This study adopted a qualitative research design, utilising semi-structured interviews to elicit data from participants. The design helped to provide a thorough understanding of the barriers that ROU academics currently face that potentially could hinder their research productivity. It is noted that this is a part of a mixed-method doctoral research study which consisted of two stages of data collection: the first stage utilised the qualitative research design (as presented here) and the second stage applied a quantitative research (not included in this present study).

**Participants**

Nineteen academics at different disciplines of ROU were interviewed in February and March 2013 in Vietnam. Each interview lasted 30–45 minutes. To avoid participant selection bias, an administrative staff member of the department of Personnel of ROU contacted randomly chosen academics and obtained their consent to participate. Potential participants received an email invitation containing an information sheet; by accepting the invitation, the staff member expressed consent to participate in the interview study. This project was approved by the Human Research Ethics Committee (EDN/A2/11/HREC) and by the President of ROU. Participants are referred to by letter and number to preserve confidentiality and anonymity (see Table 3). It is clear that not all academics have the same experiences relating to engaging in research because the problems and experiences might be impacted by gender, age, disability, proficiency of a foreign language, qualification and so on. However, in this study, the category of ‘academic’ is generally used as a common noun to indicate teaching staff at ROU.

**Procedure**

Semi-structured interviews were used. The interviews were recorded by an MP3 recorder, transcribed in Vietnamese, and then verified with the interviewees to ensure the
appropriateness of the information. Data were then translated into English by the lead researcher. The data were analysed using thematic analysis to identify common themes through the analysis of ideas. Segments of ideas were categorised into themes as guided by Boyatzis (1998). This inductive method has been used popularly across the fields by many researchers (Mills, Durepos, & Wiebe, 2010).

Findings

The findings are presented in terms of affordances, barriers, and motivations to undertake research. In the limitation of the paper, only key quotes are presented.

**Financial support for research activities (Affordance)**

It is perceived that some interviewees have a passion for research but their research productivity is limited due to insufficient research funds to buy research materials and pay a publication fee.

> I have to ask my friends who are working in the chemical industry to give me some chemicals to do my experiments because the university’s laboratories do not have them. However, I cannot ask for their support forever, so sometimes I do not have motivation to do research. (D7)

Some participants found that the limited library resource was one of the biggest obstacles for them because they lacked access to current and contemporary literature. One respondent revealed that she acknowledged the benefits of reading international journal articles, but she is unable to buy journal papers because of her limited income.

> I like reading international journal articles because they are really useful for my research and research supervision, but I am not financially affordable. If I spend the whole monthly salary for it, my salary can only enough to buy 4–5 papers while this resource is not available at ROU. (D3)

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**Table 3. Characteristics of participants.**

| Code | Academic rank   | Qualification |
|------|----------------|---------------|
| D1   | Associate Professor | Doctorate     |
| M1   | Lecturer        | Master’s      |
| D2   | Professor       | Doctorate     |
| B1   | Lecturer        | Bachelor      |
| M2   | Lecturer        | Master’s      |
| M3   | Lecturer        | Master’s      |
| D3   | Senior Lecturer | Doctorate     |
| D4   | Associate Professor | Doctorate |
| M4   | Lecturer        | Master’s      |
| M5   | Lecturer        | Master’s      |
| D5   | Lecturer        | Doctorate     |
| M6   | Lecturer        | Master’s      |
| B2   | Lecturer        | Bachelor      |
| D6   | Senior Lecturer | Doctorate     |
| D7   | Senior Lecturer | Doctorate     |
| M7   | Lecturer        | Master’s      |
| D8   | Associate Lecturer | Doctorate  |
| B3   | Lecturer        | Bachelor      |
| D9   | Lecturer        | Doctorate     |

The interviewees are presented in the table in accordance with the chronology of the interviews.
Many participants experienced this difficulty, and they had to ask their friends who were studying at overseas universities to help with materials. They, therefore, wished ROU would have more funds to update the university libraries with more books and journals for research so they can access resources quickly (M2, M7, D3, D5, and D9).

In regard to publication fees, D2’s manuscripts are sometimes charged by publishers because the manuscripts contain coloured pictures or diagrams. He always submits manuscripts to cost-free international journals although his work requires colour place reproduction for which a fee is charged by publishers.

All cost-free publishers do not charge for text, but they charge for coloured-objects. I want to put many coloured figures, diagrams, and pictures in papers, but usually I have to delete most of them. Recently, I paid USD600 for only 2 coloured-figures and that is a financial problem for me. (D2)

Regarding the publication fee, D4 who is responsible for research development at ROU commented that though ROU is aware of this problem faced by academics, it does not support academics with publication fees. The current policy of ROU is just to support academics whose paper is published in prestigious international journals which are indexed in the SCI or SSCI list of Thomson Reuters (an amount of about USD 250). Although such reward demonstrates a great effort of ROU, it does not make academics satisfied because the reward does not adequately compensate for the costs and efforts that they have spent to prepare such manuscripts.

From the findings, it may be expected that if research activities of academics were appropriately funded, their research productivity would be positively enhanced.

**Teaching load (Barrier)**

Most participants experienced a heavy teaching load. They indicated that it as the main reason for not being able to engage in research activities. Both B2 and D3 acknowledged that ROU wanted to become a research university by 2020, but the University did not reduce the enrolment of undergraduate students. They have to teach many hours at the university and in-service classes at other provinces so they did not have enough time for research. Some other participants shared different viewpoints.

If this university wants to become a research university, many more academics should be recruited to share our heavy teaching load, and I will have more time to focus on research. I am the only professor of this college and have to teach all levels from undergraduate to PhD supervision. (D2)

I have not done any research in the last two years because I have to teach a lot because my department lacks staff. While some senior academics are nearly retired, junior staff are being trained overseas. (M3)

Alternatively, teaching can be extrinsically rewarding in ways that divert energy of academics away from research because their income is increased as they teach more hours:

Although I have to teach many classes, I am happy with it because I get more money in return. I am living in a small rental flat; both my husband and I prefer teaching to research to earn money for the family. (D8)
Having a research collaborative environment in departments (Motivation)

Collaboration between colleagues was emphasised by most of interviewees. They were aware of the importance of peer support and research collaboration, especially for young academics. Some people wanted to do research but they were not self-efficacious about their capability. Collaboration may help junior/less experienced academics to improve their research skills which then enhance their self-efficacy of research.

It is always better to get ideas from some heads rather than just myself. (D8)
I used to do an undergraduate thesis but it was under a supervision of my lecturer. I am afraid I cannot finish a research project alone without any supervision, so I have not applied for any research project. (B2)
I like writing a journal paper but my writing skill is not good while the university does not provide proof-reading service before submissions. I am afraid that my papers will be rejected so I have not started writing yet. (B3)

However, some junior academics often feel afraid of asking questions or sharing ideas with senior staff in the department:
I am willing to share ideas with colleagues, especially junior academics but it seems that they did not want to ask me. Some other experienced academics also meet this situation. (D6)

More importantly, some people indicated the importance of research collaboration between ROU academics and international disciplinary colleagues because it may benefit research outcomes for ROU academics:
This university should set up more collaboration with overseas universities and organisations in research. (M2)
Our research capability will be improved quickly when joining in research projects and learning from international scholars. (M4)

On the other hand, several people said they work more effectively being alone because the collaboration did not bring many benefits for them and was time-consuming.

Some people do not have good skills of working in a group. They argue problems which are irrelevant to the topics. It wastes time to get together with them. (M5)
I used to join a research project which I was asked to do much more than my role as a team member. The chief investigator did not do much. It was unfair but you know … (M4). [the chief investigator was M4’s boss].
I was annoyed that many people in the team did not perform their responsibilities well. I had to spend so much time for editing their writing. I would prefer doing alone than cooperating with such persons. (D4)

Thus, any research policy that encourages collaboration would need to be flexibly enough to support collaboration for those who want it, but not require it of those who do not.

Research policy settings and practices (Motivation)

Responding to the question: ‘What do you think about the new research policy of the university which forces academics to publish at least one journal article per year?’ (Although all research activities are counted for a certain amount of research hours, ROU encourages
academics to publish at least one paper on the Journal of Science and Technology of ROU or other national journals in order to fulfil the requirement for research. Otherwise, one will be fined an amount of approximately to AUD150). Some staff believe that the new policy is not effective and it cannot encourage academics to publish because:

I have to teach many hours and have no time for research. I accept this deduction from the salary without any other choice (M3, B2).

I can earn about USD 300 per week when doing some construction projects with friends. So why do I have to worry about that small amount of deduction? (M2)

Alternatively, some participants think that the policy is unfair because it is imbalanced: the University does punish academics for not achieving the annual research output, but does not reward those who exceed this benchmark.

The university does not offer any reward if I have two, three or even more papers published in a year. It is not fair and is de-motivating for academics. I have published many papers and books, but the university has never especially rewarded me for this. (M1)

Similarly, some respondents expected that a rewards policy would stimulate research motivation and productivity.

If the university rewards about 30 million Vietnam dong (VND) [about USD 1500] for a paper published on international journals, some people will try their best to write and publish. (M4)

Discussions

The findings of this study illustrate how institutional factors at a particular Vietnamese university influence the research productivity of its academics. Four themes of significance emerged: (1) financial support for research activities; (2) teaching load; (3) research collaboration; and (4) research policy settings and practices.

In relation to the financial support for research activities, the findings of this study found the necessity of having a source of financial aid to cover research expenses such as buying research material for experiments, buying scholarly resources, and paying publication fees. The findings are similar to the ones of Bentley (2014) that there was a positive correlation between research productivity of academics and their satisfaction with the research support provided by a university in the areas of laboratories and research equipment. However, it was likely that ROU did not have enough finance to well-equip its laboratory which might interrupt research progress or passion of academics (as reflected by D7). Also, financial constraints of ROU led to a serious shortage of scholarly resources in the library while the access of current research literature in the field is very necessary for doing research. Bailey (1994) found that academics are more likely to be committed to research and publish more if they remain up to date with the literature in their field. However, the scholarly resources of ROU are of great concern to all participants in this study because the library does not have resource sufficiently for research, especially updated books and scholarly journals. Therefore, some academics who have intrinsic motivation to research had to spend their own money to buy books and journal papers for research, and to pay publication fees. However, they cannot afford such expenses forever. When their limited budget runs out, they are unable to engage in any more research. It can be confirmed that research motivation of academics and their publishing outputs are heavily
influenced by the university support. Therefore, it is important that ROU should provide sufficient research funds for academics to cover all expenses related to their assigned research tasks depending on the need of each task. The university should also consider providing funds for academics to attend research conferences and to attend professional courses which widen their knowledge and develop their research skills. Beside small research funds which is annually distributed by the GoV (through the administration of ministries), ROU leaders could consider seeking funds/sponsorships from other sources in industry, NGOs, and international organisations/universities for its academics.

Regarding the teaching load, although many academics understand the importance of research and want to engage more in research, their heavy teaching load prevents them from doing so. Some of the respondents were previously productive in research, but were forced to reduce the time spent on research and increase the time for teaching because their department lack academics in the field. This finding is similar to the results of Hu and Gill (2000) and Levitan and Ray (1992), which proposed that teaching load hinders research productivity. Furthermore, Chen et al. (2006) categorised reduced teaching load as an extrinsic motivation to do research. However, the finding in this study revealed that some academics prefer teaching to research because they feel their teaching will bring in more incomes. While Levin and Stephan (1991) indicated that a large amount of academics undertake research because they are extrinsically motivated to have more money, ROU academics showed that they can earn more money by teaching, so teaching was their main focus. Although ROU aims to increase the research productivity of its academics, it does not have any strategic solutions to reduce the teaching load for academics. If this problem continues, the value of research may potentially depreciate over time. Therefore, a reduction in teaching load is extremely necessary because it gives academics more time, energy, and mental capacity to focus on research. The number of teaching hours of each academic should be strictly controlled. If there is a shortage of academics, ROU should hire sessional teaching staff to fill the gaps. Klopper and Power (2014) indicated that the sessional teaching staff are effective teachers who play an important role in teaching in order to reduce the heavy teaching load occurring in a research university in Australia. Applying this measure will stop academics from teaching too many hours to get more income but then complain about a heavy teaching load.

In terms of research collaboration, on one hand, the findings support previous work of Smey and Try (2005) and Ramsden (1998) about the importance of research collaborations with colleagues. It creates a collaborative and supportive research climate within a department and across the university. Collaboration between academics is a good place which can bridge the knowledge and research expertise of academics as well as the curiosity of exploring somethings of academics. In particular, collaboration is very useful for junior academics and novice researchers. On the other hand, these findings indicate that when junior academics work together with more senior colleagues in the Vietnamese context, the former can find this a disquieting experience because of the power of the senior staff. Status hierarchy between junior and senior staff is imperative in Vietnamese society – more so than in the west. For this reason, some staff prefer to work independently; they believe that they will be more productive in research if they do not have to experience the tension of working collegially with a more senior staff member.

Finally, findings related to research policy and practices as motivational impacts reflect the reality that ROU does not yet appear to have a well-established and clear framework
for rewarding research productivity of academics. As noted earlier, previous studies show that rewards positively impact on research motivation and are an effective tool to stimulate academics research activity. It has already been shown that extrinsic rewards schemes have a positive impact on academics motivation (Levin & Stephan, 1991) in universities that have clear reward frameworks (Fairweather, 1993). Although ROU may not yet have an effective rewards policy for publications that can motivate academics to research, it has started applying a punishment rule for those who have not met the minimum annual output benchmark. This research policy may not be as effective as the University might hope, as some staff members are willing to pay the fines for not meeting the benchmarks. For those staff, the fine was less than the income they could earn by doing more teaching, and so was not sufficiently incentivizing in a context in which many people do extra work in order to supplement base salaries that are perceived to be inadequate to cover day-to-day living costs.

**Conclusions**

This paper has investigated the influences of institutional factors on the research productivity of academics at the ROU in Vietnam. Although previous research on research productivity of academics in western universities was partly replicated in this study, there are some differences in the findings that relate to the fact that Vietnam is a ‘new’ middle-income country. These differences show how important context is in the exploration and analysis of the factors that influence the engagement of ROU academics in research. The findings may inform context-sensitive strategies for improving the research productivity of ROU academics and possibly in other Vietnamese. However, the generalisability of these findings to other universities may be limited; as it is likely that the cultural and financial context of different universities may influence the way these factors affect academic motivation to undertake research. However, the purpose of the paper was not to generalise to other contexts but to explore the specific ways these issues play out in the context of this University in a developing Asian nation. Although ROU is among the key universities of Vietnam, it is still mostly a teaching-focused university.

The following important considerations were revealed in this exploratory study. First, any policy or solution should be well crafted on the basic consideration of the culture, context, and characteristics of each university. Beyond the scope of the data analysed here, a similar caveat would apply to an academic department, college, or discipline, since it is well known that discipline cultures vary considerably in terms of their conceptualisation of the importance of research and other matters related to their research productivity.

Second, leaders of this university need to be aware of the subtle ways that context can render a policy ineffective or produce unintended consequences. For example, the punishment rule for failing to meet publication benchmarks was hindered by the fact that it was not an effective incentive in a context where academics were willing to do extra paid teaching work to supplement annual incomes. Therefore, they were obviously willing to pay the fine for not writing papers. In this context, a ‘Carrot’ regime – that is, a financial rewards scheme – would probably have been more effective.

Third, the university should consider the role that the undergraduate teaching load plays in suppressing the research productivity of academics. They might examine ways in which this teaching load could be reduced. There may be a variety of ways of addressing this issue. However, there is no guarantee that if the teaching load is reduced, staff will
necessarily become more engaged in research activities. A related consideration is the balance of undergraduate to postgraduate teaching load. Previous research has shown that research collaborations with postgraduate students enhance the research productivity of academics through publications (Dundar & Lewis, 1998). Accordingly, ROU should increase the number of postgraduate students, relative to undergraduates, so academics still maintain their current teaching load but teach at a higher level.

Overall, this study shows that although respondents were aware of the importance of engaging in research and having publications, they have not thoroughly formed their academic identity as research-focused staff. The barriers such as heavy teaching load and limited support for research reduce the motivation to engage in research of them. In the new environment where academics are giving much pressure to do research and have publications, there is a conflict between the expectation of the university and the current identity of academics (who they are and what they can do at present). It is important to continuously raise the awareness of academics about the importance of doing research and having publications at ROU in order to gradually form a perception of what it means to be an academic in a ROU in their mind. As a part of the university research policy development, ROU leaders must think about effective ways to change identity of academics from teaching-focused to research-focused. Having the research-focused academic identity is predicted to increase the engagement in research of academics, rather than their either intrinsic or extrinsic motivation to it because motivation might be eroded by institutional factors and research policies of ROU.

Notes
1. Research-oriented university is the term which was translated directly from a Vietnamese term of ‘Đại học theo định hướng nghiên cứu’ (Đại học = university, theo định hướng = oriented, nghiên cứu = research). Đại học theo định hướng nghiên cứu is the term used to indicate a Vietnamese university which is in a transitional period of changing its model from a teaching-intensive university to a research university (Đại học nghiên cứu). At this transitional state, academics of the research-oriented university are still undertaking much teaching and having little engagement in research activities. In this study, the term ROU has also been used as an anonymous name of the investigated university for confidentiality.
2. Anonymous name of the city.
3. In VHE, professorship is a title awarded to distinguished academics, and not an academic rank as it is in Western universities.
4. Due to word limitation of the paper, just some quotes are presented.

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