Factors Affecting Conducting Social Sciences Research in State Universities in Sri Lanka

Fernando R.L.S.[1]*, Kularathna E.A.I.[1] and Kumarasinghe I.D.C.D.[2]

[1] Department of Public Administration, Faculty of Management Studies and Commerce,
University of Sri Jayewardenepura, Sri Lanka
[2] Department of Mechanical Engineering, Faculty of Engineering, University of Moratuwa, Sri Lanka

ABSTRACT

Higher education institutes play a significant role in creating and disseminating new knowledge. Social Sciences research, especially, contributes to social development. Similar to some developing countries, the quality, and quantity of Social Science research in Sri Lanka are the least priority. This study examines the significant factors affecting the conduct of Social Sciences research in state universities in Sri Lanka. Based on the literature review, this study hypothesized that research rewards, research allowances, time management, language competency, support of leadership, collaboration among academics, and publications opportunities significantly affect the conduct of term Social Sciences research in the state universities in Sri Lanka. The study used quantitative research methods with a stratified sample to collect data from 114 academics representing 13% of the population in the Social Science Faculties of state universities in Sri Lanka. Data were analysed using descriptive and inferential statistics. The study revealed that Time Management, Research Rewards, and Research Allowances significantly affect the conduct of research in Social Sciences. Policy measures are proposed to restore a conducive environment for conducting Social Sciences research in the state university system of Sri Lanka. As there is a dearth of research addressing the issue of the research environment using the deductive approach with reference to state universities in Sri Lanka, and as this research question has not been empirically tested, the current study fills these research gaps.

KEYWORDS: *Social Sciences, Research Environment, State Universities, Western Province, Sri Lanka*

Corresponding author: Fernando R.L.S., Email: rlsf@sjp.ac.lk

1 INTRODUCTION

The importance of conducting Social Science research is increasingly recorded. However, in Sri Lanka, there is a lesser number of Social Sciences research when compared to other fields of academic research. Publication in indexed journals is considered one criterion in considering the quality of research. The Journal of National Science Foundation (JNSF), published by Sri Lanka National Science Foundation (NSF), is indexed from the first issue of volume 36 (March 2008) by the Thomson Reuters Databases: i.e., Science Citation Index Expanded, Journal Citation Reports/Science Edition, BIOSIS Previews, Zoological Record, Biological Abstracts and Chemical Abstracts and Scopus (National Science Foundation 2015). But, the Sri Lanka Journal of Social Sciences, published by the same publisher, is indexed under none of Thomson Reuters Databases. Similarly, as per information available from Sri Lankan National Science Foundation, none of the Socials Sciences-related journals published by state universities in Sri Lanka are indexed under reputed databases. None of the Social Sciences related journals published by Sri Lankan state universities are indexed in Scopus (Elsevier 2021). Thus, there are no significant numbers of term Social Sciences-related journals published by state universities or indexed in reputed databases. One could question since indexation is one reflection of quality research output, whether the work of academics of Sri Lankan Social Sciences research be recognized as quality output. However, comprehensive research is needed to address this question as

when compared to other fields, research in Social Sciences is very limited in Sri Lanka. According to the World Bank Indicators (2017), a country's research capacity is measured based on the percentage of spending on research, the number of researchers, the number of publications in refereed journal articles, etc. Table 1 shows the research information in the South Asian Region compared to Sri Lanka. Accordingly, the number of research conducted in Sri Lanka is not at a satisfactory level.

Table 01. Budgetary Allocation and Status of Research

Criteria	Sri Lanka	Singapore	India	Bangladesh	Pakistan	Maldives
R D (% of GDP)	0.11	2.16	0.62	-	0.25	-
Researchers (per million people)	107	6730	216	-	294	-
No of Scientific journal articles	1033	11,254	110,320	2,546	9,181	5

Source: World Bank Indicators (2017)

Especially, in South Asia, due to its ethnic and religious diversity and its inherent socio-economic features, more research is needed in the field of Social Sciences. One of the main criticisms raised in Social Sciences is that research findings in the field are limited to postgraduate studies and only for academic purposes. There is little evidence about the application of Social Science research findings. There is a dearth of research examining the research environment of state universities in Sri Lanka and also this research question has not

been empirically tested. This study fills these research gaps.

1.1 Background of the Study

According to the University Grant Commission of Sri Lanka (2017), there are 15 state universities, consisting of 109 faculties in all the above universities, and among them, 32 are related to Social Sciences and Management (Sri Lanka University Statistics 2020). Predominantly, Social Sciences disciplines are included in Arts, Social Sciences, and Humanities Faculties in the universities of Sri Lanka. Since Management is concerned with one of the term Social Sciences disciplines, Management and Commerce Faculties of state universities were also considered in this study. As per the Sri Lanka University Statistics (2019), 6321 permanent academic staff members serve in 15 state universities. From them, only 2420 academics are attached to Faculties of Social Sciences and Management.

In this context, this study recognizes the significant factors affecting the conduct of Social Sciences research and highlights policy implications to restore a conducive environment for conducting term Social Sciences research in the state university system of Sri Lanka.

1.2 Social Science Research

Social Science is the study of human society, and it includes a group of diverse academic disciplines, including history, sociology, political science, anthropology, law, geography, economics, and education (Sothern 2017). Social Science Research is the activity

of gathering, analysing, and interpreting information for various social, economic, educational, and political purposes (University of Waikato 2021). The term Social Science is the study of how people interact with one another. The branches of Social Science include anthropology, economics, political science, psychology, and sociology (Liberto 2022). Research in Social Science is based on human behaviour, which is influenced by various factors such as physical, social, temperamental, psychological, and economic (Kumar 2002). Social Sciences study the behaviour of people and their decision-making process in society. The knowledge about society will help make better policies to achieve societal objectives. Therefore, social scientists play an important role in the policymaking process. Knowledge from Social Science research can be used to address a vast array of social issues such as poverty reduction, ensuring social harmony and welfare, universal education rights, etc. Hence, conducting Social Science research is highlighted in both developed and developing countries.

1.3 Theoretical Background

Theoretical underpinning and empirical research explain why things happen in the way they do. Thus, motivation theories, especially the achievement theory described by David McClelland in his 1961 book, "The Achieving Society," could be used to explain the motivation of academic behaviour in conducting research

Need Achievement Theory (McClelland 1961; Atkinson 1974)

There are no direct theories that explain why academics do research and why others do not. But McClelland's achievement theory discusses three types of needs: the needs for achievement, affiliation, and power. This theory is used to explain academic motivation in conducting research presented in the proceeding section. This is an extension of the main motivation theories of Maslow and Frederick Herzberg motivation theories. The need achievement theory explains why certain individuals are more motivated to accomplish than others. It is based on two psychological principles: the motive of an individual to achieve success and the motive of an individual to avoid failure, furthermore, individuals motivated by the need for achievement usually have a strong desire to set up difficult objectives and accomplish them, their preference is to work in a results-oriented work environment and always appreciate any feedback on their work (McClelland et al. 1953).

Another important factor is the situation's role regarding the 'probability of success and the incentive for success'. An individual who has low intrinsic motivation may become motivated to be successful if the probability of success is high and the reward on offer for success is great. Achievers like to solve problems and achieve goals. Also, achievement, recognition, and personal growth can be considered motivators (Thomson 2015).

Theory of Time Management

The theory of the hierarchy of needs was discussed by Abraham Harold Maslow in psychology, effectively combining time management with individual needs. The theory does not directly emphasize the time required to attain needs, but it actually helps someone to understand the importance of needs in their life. Once someone understands their needs, they can differentiate between those needs and set a period during which they can fulfil their needs (www. missionself.com n.d.). As long as the efficient use of time helps us meet higher goals of fulfilment, spiritually and wellbeing, we perceive it as helpful (Maslow 1954 as cited by Obijiaku 2015). The individual's time management in the aspect of purpose and satisfaction is linked to Maslow's theory of the hierarchy of needs. No matter how much a person needs to work, he or she must understand the goal of the study and the intended objective. Too much time spent at work or engaging in other activities can cause someone to lose concentration on their goals (Obijiaku 2015).

Parallel Programming Model

Zohreh Molaee, Hasan Azadzadeh, and Fariborz Dortaj in 2014 have designed the Parallel Programming Model by combining cognitive, metacognitive, physical, and emotional skills to manage all roles and tasks in a parallel way at the same time (Molaee et al. 2014, cited in Jinalee & Singh 2018). A person who faces many conflicts or is not satisfied with oneself cannot be successful even though he or she has the potential to do so. This model is designed to check the academic achievement of

married women. Time management can be focused on educational aspects, especially for those who have multiple roles to perform in their academic activities, for example, how married women continued their studies with all the different roles they have to perform towards the success of their academic life.

1.4 Empirical Research

Conducting Social Science research is influenced by various factors in different contexts. Various individual and environmental factors which may affect academics' research practices are discussed in the proceeding paragraphs.

Funding

Research funding is associated with sourcing ideas that impact research agendas by providing impulses for academic research (Hottenrott & Lawson 2012). A growing body of evidence supports the hypothesis that financial relationships are statistically associated with research outcomes (Resnik & Elliott 2013). Funding has been viewed in the literature as one of the main determinants of research activities, at an individual level, securing funding is one of the most important factors for a researcher, enabling them to carry out research projects (Ebadi & Schiffauerova 2015). Their findings demonstrate that building a collaborative network is more crucial to obtaining research funding than producing papers and receiving citations.

Research Rewards

Academic rewards refer to the tangible rewards that mark career development: promotion,

tenure, and financial compensation are granted based on peer judgment on research and publication (Online Library 2019). Most academics highly appreciate the existing research award system, which may enhance the motivation of academics to engage in research. The existing award system and conferences are encouraging academics in doing more research. In addition to that, the Vice Chancellor's award is being offered for the best researcher, which is a good motivation. It is evident that most academics highly appreciate the existing research award system, which may enhance the motivation of academics to engage in research.

Qatar University noted that the existing Research Reward Program aims to honour the efforts of outstanding researchers and encourage them to exert more to elevate academic research to the highest levels, increase research productivity, and uplift the University's academic rank (Qatar University 2019). Further, they highlight the study's main objectives to encourage publication in leading international journals, contribute actively towards achieving internationally recognized research excellence, foster collaboration with international researchers worldwide, and promote diversification of academic outcomes.

Research Allowances

Research allowance means any allowance granted for encouraging academic research and other professionals' official duties (Sensys Blog 2015). The government allocated 35% of the basic salary of academics as per the budget proposal 2011 (Jayasundera 2011). One of the most elements related to research achievement

is the funding allocated for research activities (Nafukho et al. 2019). Factors promoting research capacity development include the availability and adequacy of research funds (Kazoka & Wema 2020). Bland & Ruffin (1992) mentioned monetary bonuses as an influential factor in encouraging researchers to conduct research. This view has been supported by Gustad (1960, cited in Bland & Ruffin 1992). Jahan et al. (2018) have identified financial support as the main factor affecting the quality of academic research. Thus, research allowances could be a motivational factor for academics conducting research.

Time Management

Social Science research requires much effort and in-depth observations, including behavioural and others, and generally consumes much more time than other studies. Thus, time management becomes more significant in the case of conducting social research among academics. Effective time management may extend to improved job satisfaction and stress-related outcomes (Claessens et al. 2007). Saunders and Benbasat (2007) mentioned that publications of high quality are typically associated with more significant effort and, therefore, time investments; conversely, publishing at a "lower" level is likely to take less time (cited in Krasnova et al. 2013). Academic researchers spend their time writing applications for funding to do research, writing scientific papers to report the findings of their research, and presenting their research in oral or poster form to other scientists at group meetings, institutional meetings, and scientific

conferences; also they have to teach their students with existing time (Nature Education 2017). Time constraints is a challenge in the present research environment pertaining to fields of term Social Sciences and it is very difficult for them to deal with research activities in addition to daily academic functions without proper time management (Fernando, Hemachandra, & Muthulingam 2018).

Language Competence

When defining language proficiency in academic life, Hymes (1972, cited in Ekola 2016) introduced the concept of communicative competence, which was referred to as both knowing the grammatical systems of a language as well as the ability to apply that knowledge in language interactions. Social Science researchers lack the opportunity of being published in international journals as much Social Science research is being conducted in the Sinhala language (Fernando, Hemachandra, & Muthulingam 2018). Thus, English competence has highly impacted Social Science research performances.

Support of the Leadership

Leadership concerning academic research refers to the level of leadership and contribution given by the University's top management to the researchers. Research leadership can be defined as the influence of one or more people on the research-related behaviour, attitudes, or intellectual capacity of others (Evans 2014). Academic leadership includes such roles as creating a vision and mission based on science and research data for the organization, setting up creative ideas, and doing and providing

teamwork (Fidan 2018). Leadership support for research would help to improve research productivity by building a research "atmosphere" (Yang, 2017).

Collaboration among Academics

The collaboration aims to foster sharing of knowledge, skills, and techniques; cross-fertilization of ideas that may generate new insights or perspectives that is impossible through working alone; provision of intellectual companionship, thus overcoming intellectual isolation, and potentially increase the visibility of the work by each collaborator diffusing the findings either formally or informally (Abbas 2016). Jahan et al. (2018) have signified that teamwork influences academics toward doing qualitative research. Okendo (2018) further proved this by emphasizing the importance of the same in research activities among academics. Having a collaborative environment among academics again pushes toward more research.

Publications Opportunities

Research publications play a major role in disseminating knowledge generated through research from various scopes. Scholars are much interested in publishing international journals as it helps them to enhance their recognition internationally. Even though academics in the field of Social Sciences researchers try to publish their research in refereed journals; most of them are indexed journals publications for several reasons such as limited knowledge, lack of international experiences, poor English knowledge, cost of publication, lack of access to literature and

more time period for reviewing (Fernando, Hemachandra, & Muthulingam 2018).

A high publication fee or budget had become a growing problem (Duracinsky et al. 2017). There is a lack of social research and analytical tools for analysing social science data (Shrivastava 2015). Because of limited analytical measures and issues with fees, as discussed above, the possibility of new studies related to term Social Sciences lags. As indexed journals take a prolonged period to review, that may lead the findings of the research become outdated. Thus, social science academics put fewer attempts into publishing in internationally recognized journals (Fernando, Hemachandra, & Muthulingam 2018).

Conducting Social Science Research (Dependent Variable)

Generally, a country's research capacity is measured based on the percentage of spending on research out of GDP, number of researchers, number of publications in refereed journal articles, etc. (World Bank 2018). Abramo & Ciriaco (2013) have defined the term "Research Productivity" as "productivity" referring to those based on publication counts, and "impact" referring to those based on citation counts. What they highlight under the concept is the number of publications done by researchers and the number of citations made on each researcher's publications. Fanelli & Vincent (2016) defined the researchers' total number of research published as measuring researchers' productivity. Based on Fanelli & Vincent's (2016) definition, "the total number of research

that has been done for the last year" is the dependent variable of this study.

Based on the literature review, one main hypothesis was derived, as follows.

1.5 Main Hypothesis

Research rewards, research allowances, time management, language competency, support of leadership, collaboration among academics, and publications opportunities significantly affect the conduct of Social Sciences research in state universities in Sri Lanka.

2 RESEARCH METHODOLOGY

This study is based on the deductive research approach with quantitative research methods. Academics were selected from the term Social Sciences discipline both from the Faculties of Arts and Management. There are 2510 (Sri Lanka University Statistics 2020) academic staff in the Arts and Management faculties in all the universities in Sri Lanka. For the population, academic staff from five state universities which have Social Sciences and Management faculties in the Western Province were considered. Thus, the population was 881 (excluding academic staff working temporarily and academics who are on study leave) (Sri Lanka University Statistics 2020), and a stratified random sampling method was used to select 114 academics representing 13% of the population. Initially, the study tried a sample of 20 % of the population, but only 13% responded. A good maximum sample size is usually around 10% of the population, as long as this does not exceed 1000 (Bullen 2022). Thus, the size of the sample is 13% of the

population (with an 8.57% margin of error and with a 95% confidence level) seems adequate to produce valid results. A self-administered questionnaire was used to collect the data, and both descriptive and inferential statics were used with SPSS software to analyse the data.

3 RESULTS & DISCUSSION

The first part of this section presents a sample description. The Alpha test and Factor Analysis were conducted to ensure reliability and validity of the study. Finally, correlation analysis and regression analysis were presented to examine the factors affecting conducting Social Sciences research.

3.1 Analysis of Demographic Variables

As per the analysis, nearly 54% of the sample is female, and 75% of academics are married. About 41% of the sample is Ph.D. holders. University of Sri Jayewardenepura represents 48% of the sample, and nearly 76% of academics belong to Management, Business Studies, and Commerce faculties. Almost 28% of the sample holds the position of Senior Lecturer I. Most of the academics have 1-5 years of experience in the University, which is nearly a 25% of the sample. And almost 71% of the sample does not have membership in any research network.

3.2 Reliability and Validity of the Measures

The Dependent Variable of the study is Conducting Social Science research. The Independent variables of the study are Research Rewards, Research Allowances, Time Management, Language Competence, Support

of Leadership, Collaboration among academics, and Opportunities for Publication.

A reliability test (Alpha Value) was conducted to ensure the reliability of the measures. An alpha level of 0.5 or above is generally considered acceptable (Cronbach 1951, cited in Karunasena & Deng 2012). Construct reliability between 0.6 and 0.7 is acceptable (Hair et al. 2014). All of the variables in this study had reliability coefficient values that were higher than 0.5 which is acceptable, and there is no Multicollinearity issue. Table 02 shows reliability and validity measures.

3.3 Factor Analysis

The factor analysis was used to screen all the variables to ensure the validity of measures, and factors with a higher factor load were considered (a factor load greater than 0.05 is considered significant). The dependent variable

is conducting Social Science research, and it was measured by one item, that is, the number of research that was conducted during the last year.

3.4 Discriminant Validity

Composite Reliability (CR) and AVE were computed to ensure the internal constancy of measures. Composite Reliability (CR) measures internal consistency in scale items (Netemeyer 2003). In providing CR, the value should be greater than 0.6, and AVE should be greater than 0.5 (Fornell & Larker 1981). As Table 03 indicates, these criteria were met, and the internal consistency of these measures was ensured. As per Hair et al. (2014), AVE estimates that any two factors should be greater than the square of the Correlation between the two factors to provide discriminant validity evidence.

Table 02. Results of Factor Analysis

Variable	Items	Factor loading	TVE	Cronbach's Alpha (α)	AVE	CR
Research Rewards (RR)			86.325	0.621	0.863	0.926
RR_1	I am given promotions based on research and publication	0.929				
RR_2	My current academic position is based on my research and publication	0.929				
Research Allowances (RA)			63.807	0.703	0.637	0.835
RA_1	I am given additional payment (monetary bonus) as research allowances	0.560				
RA_2	Research allowances encourage me to do research	0.891				
RA_3	Research Allowances make it easy for me to carry on research	0.898				
Time Management (TM)			72.384	0.596	0.724	0.840
TM_1	The available time is sufficient for me to conduct research	0.851				
TM_2	I plan and organize available time concerning research activities to be completed	0.851				
Language Competence (LC)			69.688	0.772	0.696	0.873
LC_1	My English writing ability helps me to do research	0.794				

LC_2	My reading and understanding ability helps me to do research	0.852				
LC_3	My English-speaking ability helps me to do research	0.857				
Support of the Leadership (SL)			64.986	0.820	0.649	0.881
SL_1	The (leader) VC's vision and mission encourages doing research	0.815				
SL_2	University's cooperate plans are designed based on research data	0.826				
SL_3	University administration supports doing research	0.796				
SL_4	University leadership promotes teamwork for research	0.787				
Opportunities for Publication (OP)			49.147	0.738	0.465	0.812
OP_3	University provides financial assistance to cover research expenses	0.744				
OP_4	University provides financial assistance to cover registration fees	0.679				
OP_6	There is access to journals within the University	0.711				
OP_7	There are enough library facilities within the University	0.695				
OP_8	There is a speedy reviewing cycle for my research articles	0.570				

Dependent Variable

Conducting Social Science research

Number of research conducted during the last year

Source: Field Data

Table 03. Comparison between AVE and Squired Multiple Correlations (SMC)

	RR	RA	TM	LC	SL	OP
RR	0.863					
RA	0.018	0.637				
TM	0.101	0.040	0.724			
LC	0.094	0.014	0.118	0.696		
SL	0.063	0.140	0.121	0.087	0.649	
OP	0.000	0.136	0.079	0.018	0.235	0.465

Table 03 illustrates the AVE and Square Correlation Estimates of each construct. As the Table indicates, all Square Correlation estimates are lower than the AVE, which confirms the Discriminant Validity of the construct.

3.5 Correlation Analysis

The Pearson product-moment correlation matrix shows statistically significant correlations in the expected direction between Conducting Social Science research and four (4) independent research variables of the model, as shown in Table 04.

Table 04. Pearson Product- Moment Correlation Matrix for Variables

		RR	RA	TM	LC	SL	OP	CON
RR	Pearson Correlation	1						
	Sig. (2-tailed)	-						
	N	112						
RA	Pearson Correlation	.136	1					
	Sig. (2-tailed)	.153	-					
	N	112	113					

TM	Pearson Correlation	.319**	.201*	1			
	Sig. (2-tailed)	.001	.033	-			
	N	112	113	113			
LC	Pearson Correlation	.308**	.120	.344**	1		
	Sig. (2-tailed)	.001	.205	.000	-		
	N	112	113	113	113		
SL	Pearson Correlation	.251**	.375**	.348**	.296**	1	
	Sig. (2-tailed)	.008	.000	.000	.001	-	
	N	112	113	113	113	113	
OP	Pearson Correlation	-.009	.369**	.282**	.135	.485**	1
	Sig. (2-tailed)	.926	.000	.003	.157	.000	-
	N	111	112	112	112	112	112
CON	Pearson Correlation	.350**	.285**	.359**	.230*	.232*	.070	1
	Sig. (2-tailed)	.000	.002	.000	.014	.013	.462	-
	N	112	113	113	113	113	112	113

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

RR – Research Rewards, RA – Research Allowance, TM – Time Management, LC – Language Competence, SL – Support of the Leadership, OP - opportunities for Publication, CON – Conducting Social Science research.

According to the Correlation analysis, the dependent variable Conducting Social Science research is positively correlated with Research Reward ($p < 0.01$) (Research Allowance ($p < 0.01$), Time Management ($p < 0.01$), Support of the Leadership ($p < 0.05$), and Language Competence ($p < 0.05$). But there is no significant relation with Opportunities for Publication.

3.6 Regression Analysis

The study used 'Stepwise Regression' for the analysis. Even though there is a significant correlation forfive independent variables with the dependent variable, Stepwise regression analysis excludes two other independent variables (Support of the Leadership and Language Competence (as there is no significant relationship with the dependent variable.)

Table 05. Regression Test Results

Predictor	Standardized Regression coefficient	T-Value	Significance
Time Management	.244	2.699	.008
Research Rewards	.245	2.745	.007
Research Allowances	.203	2.353	.020
Constant		-2.768	.007
R	.482c		
R2	.232		
Adjusted R Square	.211		
F	10.886		

*p<0.05, **p<0.01, ***p<0.001 Regression coefficients presented are standardized coefficients

According to the test results, three independent variables, namely, Time Management, Research Rewards, and Research Allowances, are statistically significant with the dependent variable of conducting Social Science research. These three variables explain the 21.1% variance of the dependent variable of Conducting Social Science research. Other

hypothesized variables are not significantly affecting the dependent variable.

3.7 Discussion

There are similar findings brought to light by various scholars in their previous studies including two selected theories, namely, motivation theory and Parallel Programming Model.

- *Time Management*

Time Management is a factor that affects conducting Social Science research. Spending too much time at work or engaging in other activities can cause one to lose focus on their goals (Obijiaku 2015). Concerning setting limits on research problems, time is the factor that is considered important (Yalcin et al. 2016). Effective time management allows researchers to focus on their work, contributing to research productivity, thus, improving time management skills is essential in developing and sustaining a successful research program (Chase et al. 2013). Lodhi (2012) found that time for doing research is one of the main barriers to academics who spend most of their time teaching and do not have adequate time to conduct research or involve themselves in research-related activities.

- *Research Rewards*

The rewards include intrinsic rewards and extrinsic rewards like salary, bonuses, recognition, praise, flexible working hours, and social rights (Skaggs et al. 1991). As per Maslow's Hierarchy of Needs Theory, a person can be motivated by rewards (Sands 2020). Appropriate rewards are one of the

environmental factors that stimulate and maintain research productivity (Bland & Ruffin 1992). Resource allocation for research has a direct effect on research output (Valdivieso et al. 2022). Academic research and publications should be valued and linked to promotions; hence, research reward is considered a significant determinant of Social Science research in state universities in Sri Lanka.

- *Research Allowances*

Research allowances significantly affect conducting of Social Science research. Many rewards influence on employee performance (Ajila & Abiola 2004). According to Frederick Herzberg's motivation theory, salary or other additional financial payment is a hygiene factor for an employee (Thomson 2015). Financial support is one of the main factors affecting the quality of academic research by their study and academic research and publications should be valued and should be linked to financial rewards (Jahan et al. 2018).

The availability of funds is also identified as an important factor influencing research productivity (Wood, 1990). Economic benefits are a crucial concern in conducting research and there were more financial benefits associated with teaching than research (Lodhi 2012). highlighted that the University should provide financial support for those Faculty members attending research conferences or seminars to encourage them to increase research productivity (Okendo 2018).

4 CONCLUSION & RECOMMENDATIONS

The focus of this study is to examine the significant factors affecting conducting of Social Science research and highlight policy implications for a conducive environment for conducting Social Science research in state universities in Sri Lanka. Based on the study, three variables, Time Management, Research Rewards, and Research Allowances, significantly affect the conduct of Social Science research. The results suggest that the time invested in research is an important factor as most academics must manage their time to conduct research. Because they have to do research while conducting their lectures and other academic-related activities. Also, academics will encourage themselves in doing research if they get adequate and reasonable research allowances and research rewards as it facilitates them to engage in research. Thus, based on the study's findings, the following recommendations are proposed to maintain a conducive environment for conducting Social Science research in state universities in Sri Lanka.

- *Allocating Adequate Time for the Conducted Research*

Academics are doing much administrative and coordinating works, which limit time for research and publications. Thus, academics need more freedom, autonomy, and encouragement to engage in research work and publications by releasing them from administrative activities. Their role should be devoted more on teaching and research. Thus, sufficient time should be allocated to academics for research, and they must be able to organize available time concerning research activities to be completed. Academics should have the capability of managing work and allocating time for their research.

- *Maintaining a Proper Research Rewards System*

Tangible benefits (such as promotion, tenure, and financial compensation) based on research and publications make the career development of academics. Many academics engage in research connected with their earnings and promotions (for rapid publication), leading to low-quality publications. Assessment of research work should be an important promotional criterion. Thus, a well-designed research award scheme should be established. Under this scheme, many awards such as the best researcher of the year at Department level and Faculty level and research discipline wise could be initiated. Further, compensation based on both quality and quantity should be provided to academics to encourage Social Science research. Thus, academics' recruitment and promotion should mainly be based on their research and publications.

- *Introducing and Maintaining Proper Research Allowances*

Academics should be provided additional financial facilities and other support without rigid rules and regulations. Financial assistance for English editing services, performance-based research allowance, expanding the opportunity for indexed journal publications by paying the publication charges and increasing

monthly research allowances, and other facilities should be provided.

Further, the university administration should revise the existing procedures for obtaining research grants, and the Government authorities could introduce incentives to develop a research culture within the state universities. The universities should provide more training opportunities for the academics to encourage to do research and provide enough funds and opportunities for publication.

4.1 Limitations and Further Research

The research has limitations that need to be addressed. Academic's lack of interest in responding is one of the main limitations of this research. As a result, the response rate is low. Almost 50% of the data is from one university and the representation of the other three universities is very little, due to the less response of other selected universities. Also, this study was conducted by covering only four universities which are situated in the Western province of Sri Lanka. Therefore, future research could cover the entire university system, including the non-state sector, with a larger sample to explore unexplained variables.

ACKNOWLEDGMENT

REFERENCES

Abbas, KD 2016, 'Patterns of Scholarly Collaboration among Academics in Nigerian Universities: Knowledge Sharing or Knowledge Hoarding?', Journal of Balkan Libraries Union (Bayero University, Kano, Nigeria), vol. 4, no.2, (November 2016), pp 28-34. Available from: https://dergipark.org.tr/download/article-file/275569. [31 May 2021]

Abramo, G & Ciriaco, AD 2013, 'How do you define and measure research productivity?', International Society of Scientometrics and Informetrics Conference. Vienna, 2013, pp 15-19. Available from: https://arxiv.org/ftp/arxiv/papers/1810/1810.12830.pdf. [21 May 2021]

Ajila, C & Abiola, A 2004, Influence of rewards on workers performance in an organization. Journal of Social Sciences, vol. no. 1, pp 7-12.

Bland, CJ & Ruffin, MT 1992, 'Characteristics of a productive research environment: a literature review', Academic Medicine, vol. 67, no.6, pp 385-397.

Bullen, PB 2022, How to choose a sample size (for the statistically challenged). Available from: https://tools4dev.org/resources/how-to-choose-a-sample-size/#:~:text=A%20good%20maximum%20sample%20size%20is%20usually%20around%2010%25%20of,the%20maximum%20would%20be%201000. [16 March 2023]

Claessens, BJ, Van Eerde, W, Rutte, CG, & Roe, RA 2007, A review of the time management literature. Personnel Review, vol. 36, no 02, pp 255–276.

Chase, JAD, Topp, R, Smith, CE, Cohen, M Z, Fahrenwald, N, Zerwi, JJ, & Conn, VS 2013, 'Time Management Strategies for Research Productivity', Western Journal of Nursing Research, vol. 35, no.2, pp 155-176. doi:10.1177/0193945912451163

Duracinsky, M, Lalanne, C, Rous, L, Dara, A F, Baudoin, L, Pellet, C, Descamps, A, Péretz, F, & Chassany, O 2017, 'Barriers to publishing in biomedical journals perceived by a sample of French researchers: results of the DIAzePAM study', BMC medical research methodology, vol. 17, no.1, p.96. Available from: https://doi.org/10.1186/s12874-017-0371-z. [23 April 2021]

Ebadi, A & Schiffauerova, A 2015, 'How to Receive More Funding for Your Research? Get Connected to the Right People!,' PLOS ONE, vol. 10, no.7. Available From: https://doi.org/10.1371/journal.pone.0133061. [03 May 2021]

Ekola, T 2016, English language needs and language proficiency of academic professionals as a basis for developing language training - A case study of environmental researchers. University of Jyväskylä. Available From: https://jyx.jyu.fi/bitstream/handle/123456789/53038/1/URN%3ANBN%3Afi%3Ajyu-201702141439.pdf. [23 April 2021]

Elsevier 2021, About Scopus. Available From: https://www.elsevier.com/solutions/scopus. [18 March 2021]

Evans, L 2014, 'What is effective research leadership? A research-informed perspective,'

Higher Education Research and Development (Eprints), vol. 33, no.1, pp 46-58. Available from: doi: doi.org/10.1080/07294360.2013.864617. [18 March 2021]

Fanelli, D & Vincent, L 2016, 'Researchers' Individual Publication Rate Has Not Increased in a Century', Plos One. Available from: doi: 10.1371/journal.pone.0149504. [20 March 2021]

Fernando, RLS, Hemachandra, DWK. & Muthulingam, A 2018. 'An Assessment of the Social Science Research Environment of the Sri Lankan State University System.' Vidyodaya Journal of Management (University of Sri Jayewardenepura), vol.4, no. 2: 18.

Fidan, T 2018, Vocational Identity and Career Construction in Education. Turkey.

Fornell, C. and Larcker, D.F. (1981), Evaluating structural equation models with unobservable variables and measurement error, Journal of Marketing Research, Vol. 18 No. 1, pp. 39-50, http://www.jstor.org/stable/3151312.

Hair, JF, Black, WC, Babin, BJ & Anderson, RE 2014, Multivariate data analysis: Pearson new international edition, Essex: Pearson Education Limited, vol.1, no.2

Hottenrott, H & Cornelia, L 2012, Research Grants, Sources of Ideas, and the Effects. Centre for European Economic Research.

Jahan, F, Siddiqui, MA, Khabouri, ZAI, Riyami, RFMAI, & Ahuja, A 2018, 'Factors

influencing the quality of academic research: perception of faculty researchers at Oman Medical College', Medical and Clinical Archives (OAT), vol. 2, no.1, pp 1-5. doi:10.15761/MCA.1000127

Jayasundera, PB 2011, Payment of Research Allowances as per the Budget Proposals, Available from: http://www.treasury.gov.lk/documents/10181/ 47156/msd-2011-44.pdf/c6d6e85e-1120-4ed9-9000-f1e5ce614a05?version=1.0. [19 March 2021]

Jinalee, N & Amit, KS 2018, 'A descriptive study of time management models and theories', International Journal of Advanced Scientific Research and Management, vol. 3, no.9, pp 141-147. Available from: https://www.researchgate.net/publication/3278 90577_A_descriptive_study_of_time_manage ment_models_and_theories. [18 May 2021]

Karunasena, K & Deng, H 2012, 'Critical factors for evaluating the public value of e-government in Sri Lanka', Government information quarterly, vol.29, no.1, pp 76-84.

Kazoka, JE & Wema, E 2020, 'An Analysis of the Factors Influencing Research Capacity Developments in Higher Education Institutions in Tanzania', University of Dar es Salaam Library Journal, vol. 15, no. 1, pp 45-66

Krasnova, H, Natasha, V, Tyge, K, Kerstin, S, & Carol, S 2013, 'Publication Trade-Offs for Junior Scholars in IS Conjoint Analysis of Preferences for Quality, First Authorship, Collaboration, and Time', Thirty-Fourth

International Conference on Information Systems. General IS Topics.

Kumar, R 2002, Research methodology in social science, India: Sarup and Sons Publishers.

Liberto, D 2022, Social Science: What It Is and the 5 Major Branches, www.investopedia.com. Available from: https://www.investopedia.com/terms/s/social-science.asp. [14 March 2023]

Lodhi, AS 2012, 'A pilot study of researching the research culture in Pakistani public universities: the academics' perspective', Procedia - Science and Behavioral Sciences, vol. 31, pp 473-479.

McClelland, DC 1961, The Achieving Society. Van Nostrand, Princeton, N.J., [1961], ISBN: 9780029205105.

Nafukho, FM, Wekullo, CS, Muyia, MH 2019, 'Examining research productivity of faculty in selected leading public universities in Kenya'. International Journal of Educational Development, vol. 66, no. 2, pp 44-51, Available from: https://doi:10.1016/j.ijedudev.2019.01.005. [13 March 2023]

National Science Foundation 2015, National Science Foundation, Available from: http://www.nsf.ac.lk/index.php/nsf-science-magazine. [14 May 2021].

Nature Education. Academic Research 2017, Available from:

https://www.nature.com/scitable/topicpage/academic-research-13997330. [21 May 2021]

Netemeyer, GR, Bearden, OW, & Sharma, S 2003, Scaling Procedures: Issues and Applications. SAGE Publications

Obijiaku, UJ 2015, Effective Time Management for Haaga-Helia UAS International Students Porvoo Campus, Bachelor Thesis, HAAGA-HELIA University of Applied Sciences.

Okendo, OE 2018, 'Constraints of Research Productivity in Universities in Tanzania: A Case of Mwenge Catholic University, Tanzania', International Journal of Education and Research, vol. 6, no.3, Available from: http://www.ijern.com/journal/2018/March-2018/21.pdf. [21 May 2021]

Online Library 2019, Online.library.com.willey.com, Available from: https://onlinelibrary.wiley.com/doi/pdf/10.1002/aehe.3640080206. [20 May 2021].

Qatar University. Research 2019, Available from: http://www.qu.edu.qa/research/offices/research-support/publication-rewards. [14 May 2021]

Resnik, BD, & Elliott, CK 2013, 'Taking financial relationships into account when assessing research', Accountability in Research, vol. 20, no.3, pp 184–205, Available from: https://doi.org/10.1080/08989621.2013.788383. [15 April 2021]

Sands, L 2020, What are motivation theories?, Employee Engagement, Available from: https://www.breathehr.com/en-gb/blog/topic/employee-engagement/what-are-motivationtheories#:~:text=Motivation%20theory%20is%20the%20study,productive%20employee%20is%20more%20profitable. [16 April 2021]

Sensys Blog 2015, Allowance under section. vol.10, no.14, Available from: https://www.sensystechnologies.com/blog/?tag=research-allowance. [17 April 2021]

Shrivastava, UP 2015, 'Challenges in Social Science Research', International Journal of Social Sciences and Management (SEM-Biotech publishing), vol.2, no.1, Available from: https://doi.org/10.3126/ijssm.v2i1.11926. [18 April 2021]

Skaggs, KJ, Dickinson, AM, & O'connor, KA, 1991. The use of concurrent schedules to evaluate the effects of extrinsic rewards on "intrinsic motivation": a replication. Journal of Organizational Behavior Management, vol. 12, 1991 - Issue 1

Sothern, M 2017, How to Conduct Social Science Research. Pen and the pad Available from: https://penandthepad.com/conduct-social-science-research-5799948.html. [18 April 2021]

Sri Lanka University Statistics 2020, University Grants Commission, Available from: https://www.ugc.ac.lk/index.php?option=com_

content&view=article&id=2301%3Asri-lanka-university-statistics-2020&catid=55%3Areports&Itemid=42&lang=ta. [01 August 2022]

Thomson, I 2015, Maslow, Herzberg and Pink's Motivational Theories in the Workplace. Our Employee Benefits Blog/Sodexo Engage, www.sodexoengage.com, Available from: https://www.google.com/amp/s/www.sodexoengage.com/blog/rewards-recognition/maslow-herzberg-and-pinks-theories-in-the-workplace%3fhs_amp=true. [17 April 2021]

The World Bank Group 2018, Research and development expenditure (% of GDP.) Available from: https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS

University Grants Commission 2019, Sri Lanka University Statistics, Available from: https://www.ugc.ac.lk/index.php?option=com_contentandview=articleandid=2220%3Asri-lanka-university-statistics-2019andcatid=55%3AreportsandItemid=42andlang=en. [18 April 2021]

University of Waikato 2021, Social Science Research, Available from: https://www.waikato.ac.nz/study/subjects/social-science-research. [21 April 2021]

Valdivieso, PA, Alecchi, BA, & Avecillas, DA 2022, 'Factors that Influence the Individual Research Output of University Professors: The Case of Ecuador, Peru, and Colombia', Journal of Hispanic Higher Education, vol. 21, no.4, pp 450–468.

Wood, F 1990, 'Factors Influencing Research Performance of University Academic Staff', Higher Education (Springer), vol.19, no.1, pp 81-100, Available from: https://www.jstor.org/stable/3447204. [22 April 2021]

World Bank Indicators 2017, Available from: https://data.worldbank.org/indicator. [15 May 2021]

www. missionself.com, n.d., Time Management Theories to Show its Utmost Significance. Available from: https://missionself.com/time-management-theories. [16 March 2023]

www.betterevaluation.org, 2018, Six rules of thumb for determining sample size and statistical power. Available from: https://www.betterevaluation.org/tools-resources/six-rules-thumb-for-determining-sample-size-statistical-power. [16 March 2023]

Yalcin, M, Fatih, B, Ozge, O, & Engin, K 2016, 'Factors Affecting the Identification of Research Problems in Educational Administration Studies', Educational Sciences: Theory and Practice, vol.16, no.1, pp 23-52.

Yang, JC 2017, 'A study of factors affecting university professors' research output: perspectives of Taiwanese professors', Journal of College Teaching & Learning, vol.14 no.1, pp 11–20.