Texila International Journal of Academic Research
ISSN: 2520-3088
DOI: 10.21522/TIJAR.2014.11.01.Art013

Research Output and Knowledge Translation Among Faculty Members of University of Technology, Jamaica

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Abstract

Universities are very important assets to produce research knowledge. The three major responsibilities of university faculty members are teaching, research, and community service. Balancing these three responsibilities is often very challenging, and the work that suffers most is research. The government of every nation looks up to its universities to produce research knowledge. The goal is to investigate the research output and knowledge translation among faculty members at Jamaica's national university. A descriptive quantitative cross-sectional design was used for this study. This design was used to collect data from faculty members at one point in time. Most of the respondents (56.3%) perceived a lack of protected time for research as a barrier to research productivity. Seventy-five percent of the respondents reported having published one research article as the first author in the last two years. The majority (75%) of the respondents have concerns about the research policy of the university. The most common perceived barrier to knowledge translation (KT) was a lack of awareness of the concept of KT. The faculty members are experiencing challenges in conducting research and translating research findings.

Keywords*: Knowledge translation, Research output.*

Introduction

Traditionally, universities have the responsibilities of conducting research and disseminating the findings of research. The three major responsibilities of university faculty members are teaching, research, and community service [1-3] A number of studies have identified obstacles to research productivity among university faculty members around the world [1, 4]. At the University of Technology, Jamaica, some faculty members have anecdotally expressed challenges balancing didactic instructions, clinical and laboratory facilitation, and conducting research. This problem warrants investigation. Knowledge translation involves the synthesis, exchange, and application of knowledge by relevant stakeholders to accelerate the benefits of global and local innovation in strengthening health systems and improving people's health [5]. All areas of the discipline of health practice and policy should base decision-making on the best research evidence. Examples of critical questions requiring evidence-based answers include: How should health care providers and policymakers improve on existing health care interventions? What should health care providers do to increase safety? What about cost-effectiveness in health care practices and policies? Conducting research and using the findings is the answer to these questions. Failure to do so may result in serious consequences for consumers of health care and the inefficient use of limited resources for health care. It was recommended by [6] that examining the characteristics of the cultural, political, and economic context within which research is conducted and transfer activities are implemented is important. Production and translation of local evidence in health research are important. Moreover, health researchers

Received: 15.01.2024 ***Accepted: 23.01.2024*** ***Published on: 24.01.2024***
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have the responsibility to collaborate with stakeholders not only in disseminating research findings but also at the conceptual stage of research. Universities are expected to contribute to policy positions in various areas of human endeavour. The study of knowledge translation is a developing area, especially in developing nations. This study is expected to pave the way for more studies in the Caribbean in the area of KT. Understanding KT activities among stakeholders in health care delivery will significantly reduce the gap that exists between knowledge, practice, and policy. The highlighted importance of the translation of knowledge generated from health research to key stakeholders responsible for health care policy and service delivery justifies the importance of this study. Knowledge translation is required for delivering the benefits of health research so that research results can be utilized to solve health problems as well as formulate evidence-based health policies, but at this point, it is important to address yet another very important challenge, which is the barriers to research output among faculty members. Universities are very important assets to produce research knowledge [1].

The three major responsibilities of university faculty members are teaching, research, and community service [1, 2]. Balancing these three responsibilities is often very challenging, and the work that suffers most is research [2]. The government of every nation looks up to its universities to produce research knowledge, but there are constraints among faculty members in low- and middle-income countries in fulfilling this responsibility [1, 4]

The World Health Assembly in May 2005 called for more research in developing countries to strengthen health systems [7]. The aim is to investigate the research output and knowledge translation among faculty members at Jamaica's national university. It was recommended by [6] that examining the characteristics of the cultural, political, and economic context within which research is conducted and transfer activities are implemented is important.

Materials and Methods

Research Design

A descriptive quantitative cross-sectional design was used for this study. This design was used to collect data from the participants at one point in time. The survey was conducted to describe the nature of research productivity and knowledge translation among the respondents.

Area Of Study

There are eight faculties or colleges at the University of Technology Jamaica, namely, the College of Business and Management, the College of Health Sciences, the Faculty of Built Environment, the Faculty of Education and Liberal Studies, the Faculty of Engineering and Computing, the Faculty of Law, the Faculty of Science and Sports, and the Joint Colleges of Medicine, Oral Health, and Veterinary Sciences. The strategy map of the university includes a student-centred and research-driven working environment where core values are lived by all. While Core Processes focuses on applied research for national impact and encourages pure research for breakthrough discovery, to achieve this mission, emphasis must be placed on research and the utilization of the findings of research in decision-making.

The university's mission is to positively impact Jamaica and the wider Caribbean through high-quality learning opportunities, research, and value-added solutions to government, industry, and communities. This will be accomplished through "focusing on applied research to address national and regional challenges and by lobbying decision makers." The mission of the university underscores the importance of research productivity and knowledge translation among the faculty members.

Study Population

The target population of this study consists of full-time faculty members in health-related departments namely, College of Health Sciences and Joint Colleges of Medicine Oral health and Veterinary Sciences. There are 56 faculty members in College of Health Sciences and about 20 faculty members in Joint Colleges of Medicine Oral health and Veterinary Sciences.

Sampling Method

The survey instrument was sent to all respondents via email in November 2022. This is a method in which data is collected from everyone in the target population. This method has the advantage of timeliness; it is also effective in minimizing sampling bias. Census method is preferred over sampling whenever this possible [8]. Furthermore, because data collection was done electronically, this reduced time consumption associated with census survey.

Data Collection Procedure

The data collection instrument that was used is a questionnaire. The questionnaire consists of three sections, namely A, B and C of which some items are Likert-type questions [9]. Section A focuses on Socio-demographic data of each participant. Section B covers items on Research Productivity among faculty members. This gives the researcher an idea about the factors that influence the research output of the respondents. Section C covers questions about Knowledge Translation (KT) practices of the respondents. After obtaining ethical clearance from the research ethics committee of the university email list of the respondents were accessed and the survey instrument was sent via email to all the faculty members who meet the inclusion criteria namely full-time academic staff within the study population. Data collection started in November 2022 and ended in January 2023. The response from the participant was very slow so follow up emails were sent to maximize response, but the response rate was still poor.

Data Analysis

Data was analysed using Microsoft Excel and Statistical Package of Social Sciences (SPSS) version 21 to address the aim and objectives of the study: to determine the barriers and enhancers of research output of faculty members as well as their knowledge translation activities. Results of the analysis was presented in tables and charts.

Results

Table 1. Socio-demographic Characteristics of the Respondents

Socio-Demographic Data	**Mean**	**Range**	**Standard Deviation**	**Sum**	**Total N**
Age	2	3	1	37	16
				Number	**Percentage (%)**
Gender		Female		12	75.0%
		Male		4	25.0%
Highest level of education completed		Master of Philosophy		0	0.0%
		Master of Science degree		10	62.5%
		Doctor of philosophy		4	25.0%
		Other doctorate degrees		2	12.5%
		Others		0	0.0%
College/Faculty		College of Health Sciences		15	93.8%
		Joint colleges of Medicine, Oral Health, and Veterinary Sciences		1	6.3%
Current position		Lecturer		13	81.3%
		Senior Lecturer		0	0.0%

	Associate professor	2	12.5%
	Professor	1	6.3%
	Others	0	0.0%
Employment type	Tenured	8	50.0%
	Untenured	8	50.0%
Current discipline	Dentistry	0	0.0%
	Epidemiology	1	6.3%
	Nursing	10	62.5%
	Nutrition /Dietetics	1	6.3%
	Medical laboratory Science/Technology	0	0.0%
	Medicine/Surgery	0	0.0%
	Pharmacy	2	12.5%
	Public health	1	6.3%
	Others	1	6.3%
Administrative responsibilities	Yes	9	56.3%
	No	7	43.8%
Research interest	Knowledge Translation	1	6.3%
	Nutrition obesity, chronic non communicable diseases	2	12.5%
	Clinical Pharmacy	1	6.3%
	Education	1	6.3%
	Emergency/critical care nursing	2	12.5%
	nursing and health related issues	1	6.3%
	public health	4	25.0%
	Infectious diseases, specifically HIV prevention and control	1	6.3%
	Chronic diseases, paediatric diabetes	2	12.5%
	Gerontology	1	6.3%

The descriptive statistics of the socio-demographic data of the respondents in this study. The mean age of the respondents is 37 years, with a range of 2-3 years and a standard deviation of 1. There were 16 respondents in total, with 75% of them being female and 25% being male.

In terms of the highest level of education completed, 62.5% respondents had a Master of Science degree, 25% had a Doctor of Philosophy degree, and 12.5% had other doctorate degrees. Most of the respondents 93.8% were from the College of Health Sciences, with only 6.3% respondent from the Joint colleges of Medicine, Oral Health, and Veterinary Sciences.

In terms of current position, 81.3% respondents were lecturers, 12.5% were associate professors, and 6.3% was a professor. The employment type was evenly split, with 50% respondents being tenured and 50% being untenured. The most common discipline among the respondents was nursing, with 62.5% respondents. Only 12.5% respondents were from the pharmacy discipline. In terms of administrative responsibilities, 56.3% respondents had such responsibilities, while 43.8% did not. Four respondents 25% selected

Public Health as their area of research interest. Other topics of interest included chronic non-communicable diseases, emergency/critical care nursing, and infectious diseases, among others.

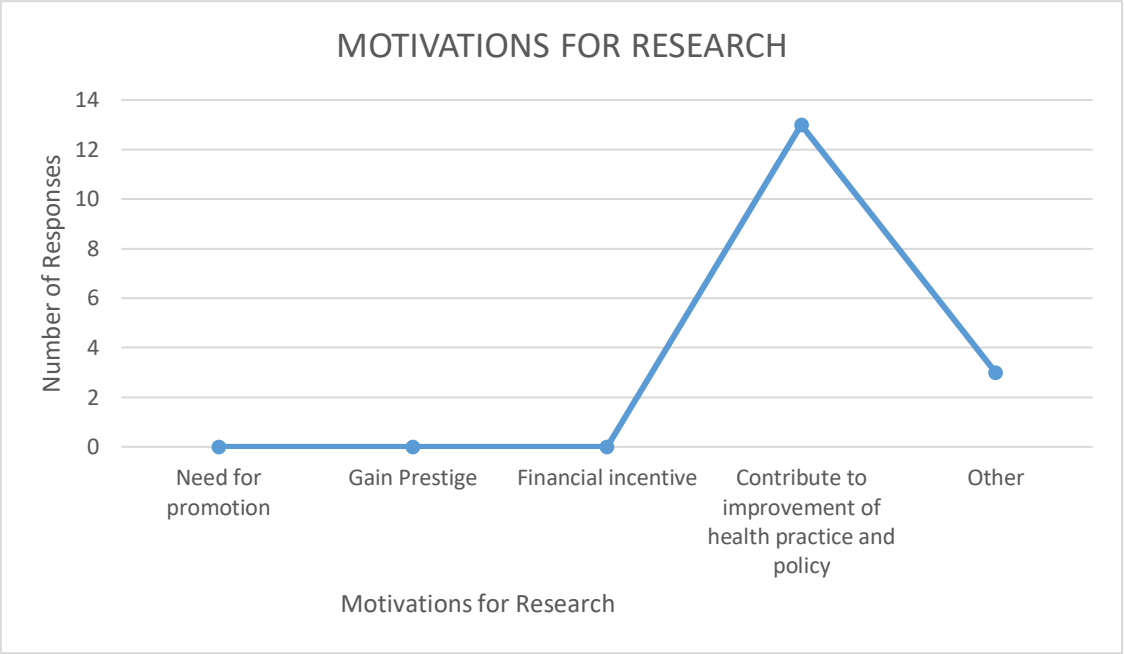

Figure 1. Participant's Motivation for Research

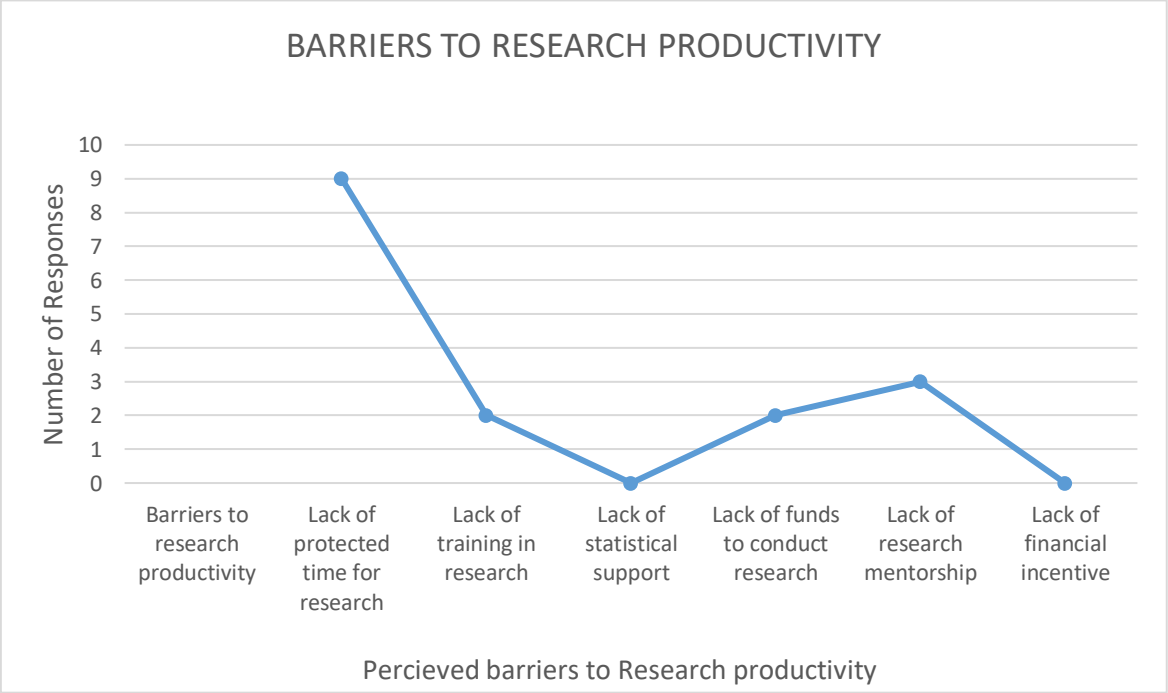

Figure 2. Respondent's Perception of Barriers to Research Productivity

Figure 3. Hours Spent Weekly on Research Work by Respondents

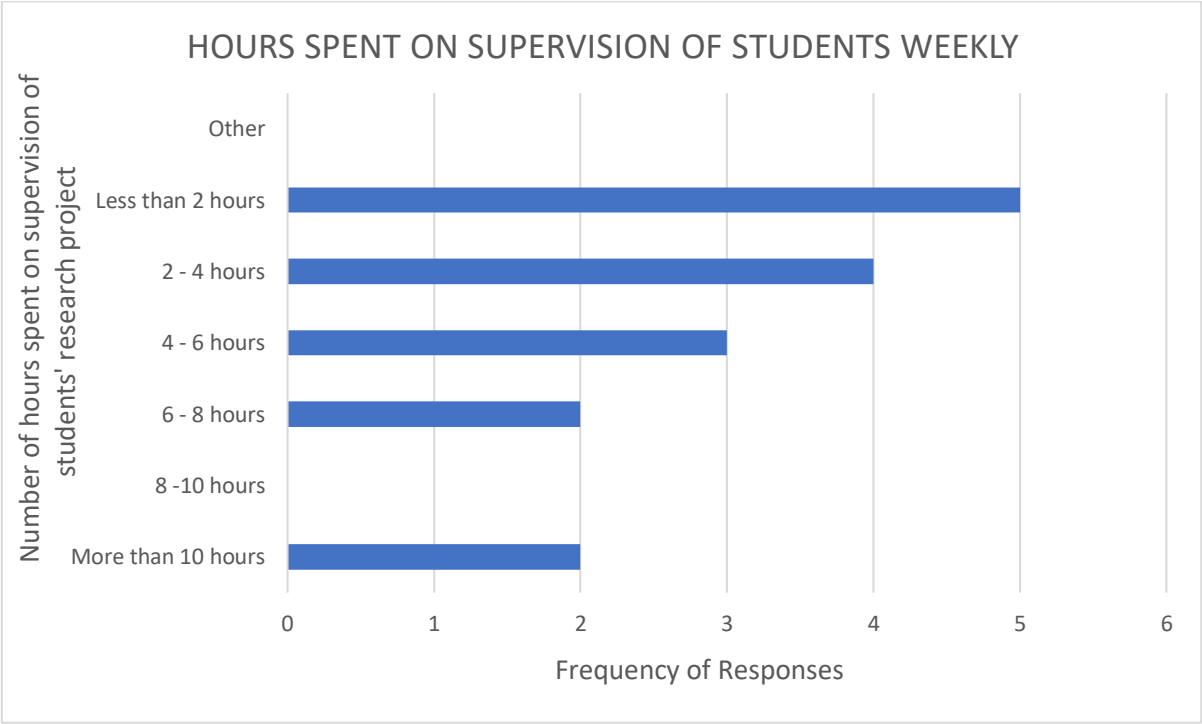

Figure 4. Hours Spent Weekly on Research Supervision by Respondents

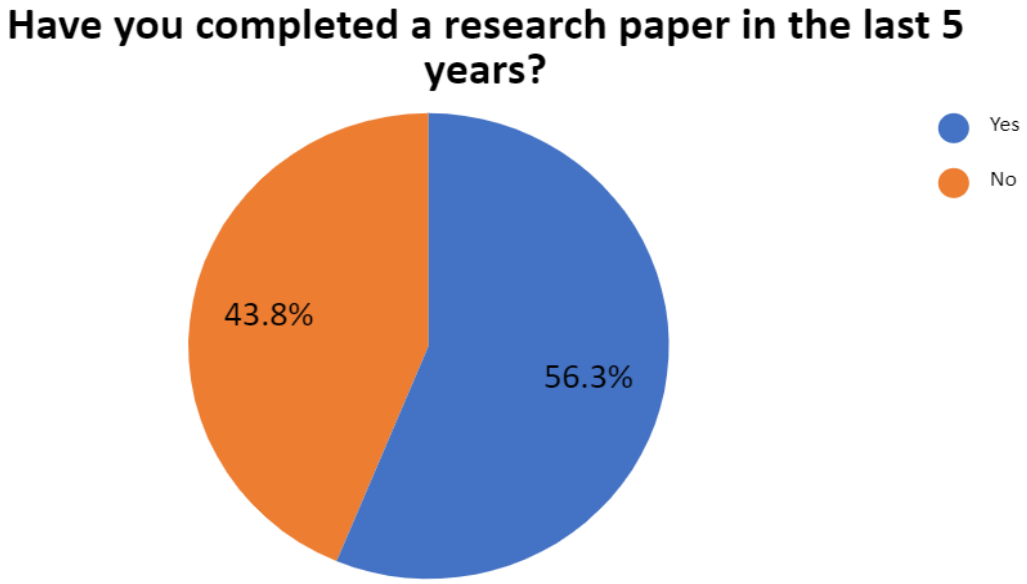

Figure 5. Participants' Responses about Completing Research Paper in the Last Five Years without Publishing

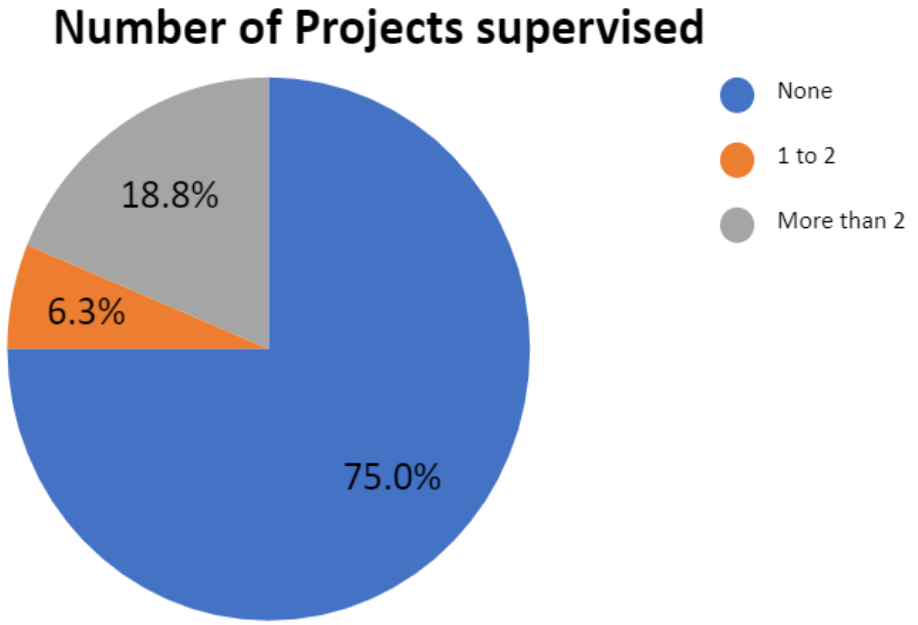

Figure 6. Number of Published undergraduate Students' Research Projects Supervised by the Respondents in a Peer Review Journals in the last Five Years

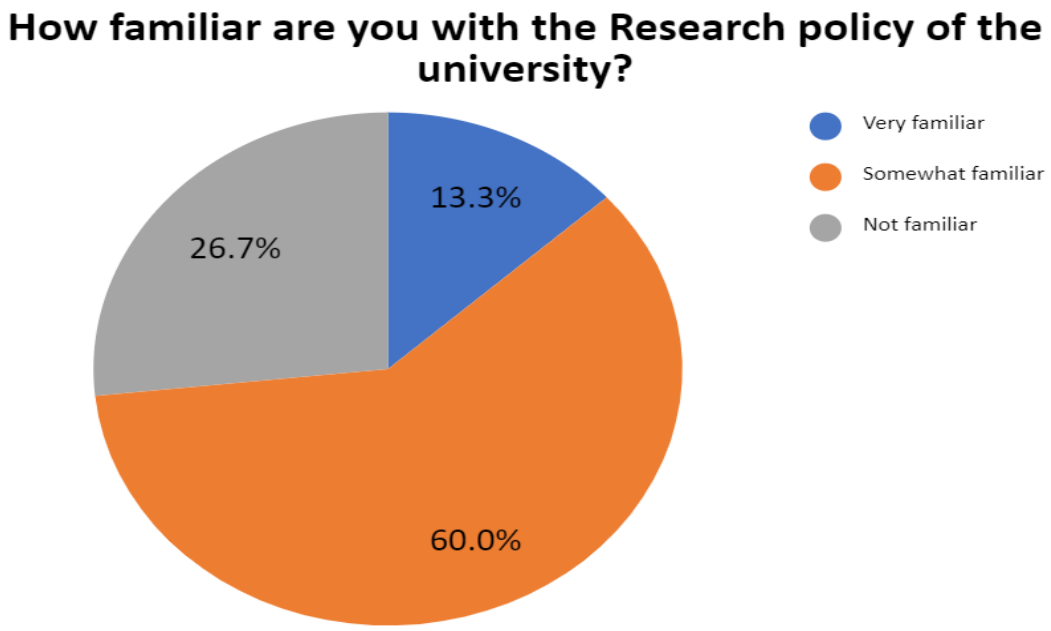

Figure 7. Respondent's Familiarity with the University's Research Policy

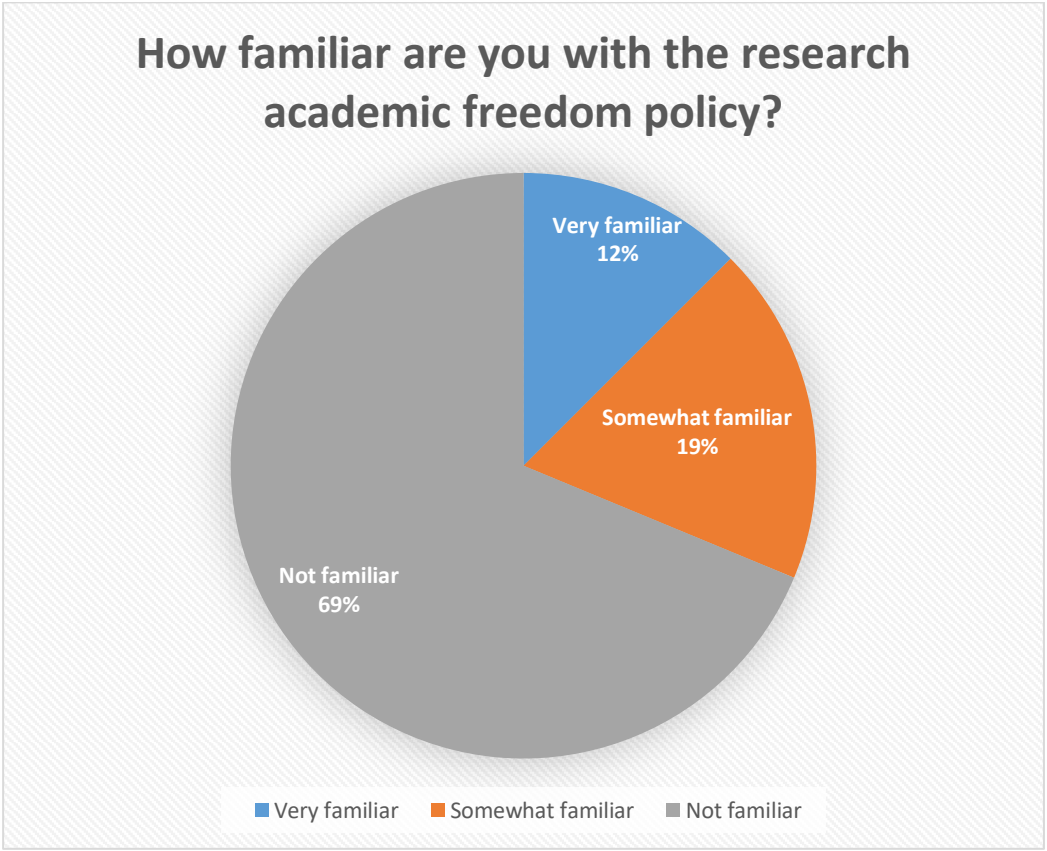

Figure 8. Respondent's Familiarity with the University's Academic Freedom Policy

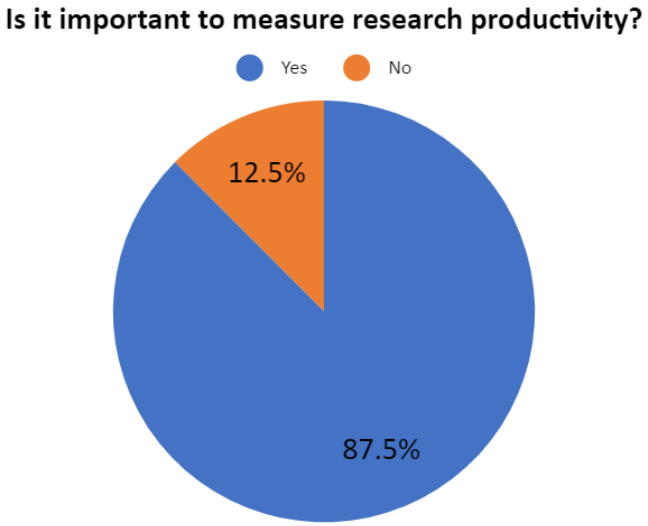

Figure 9. Participant' Responses about the Importance of Measuring the Research Output of each Faculty Member

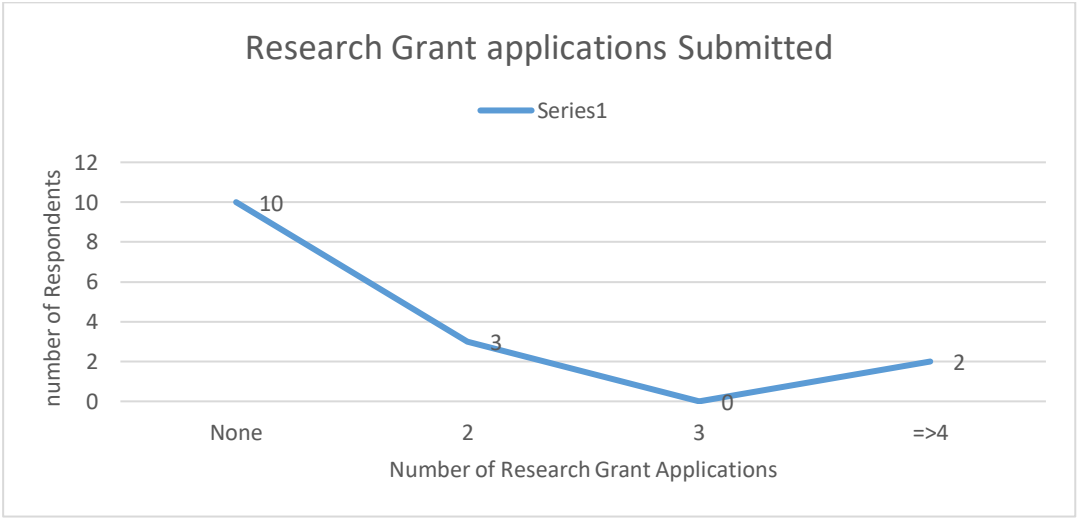

Figure 10. Line Graph Depicting Research Grant Applications Submitted by the Respondents

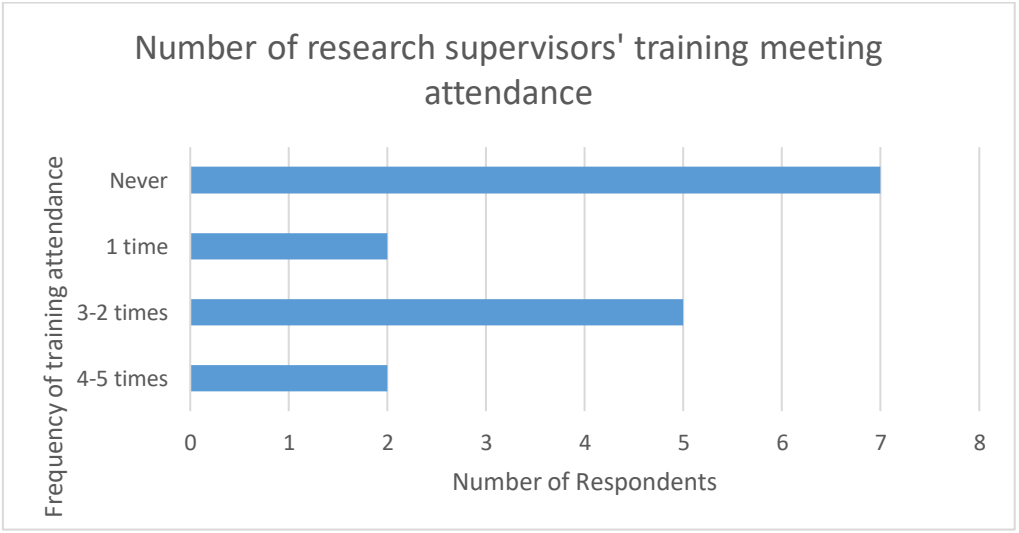

Figure 11. Distribution of Respondents' Attendance of Training for Research Supervisors in the Last 5 Years

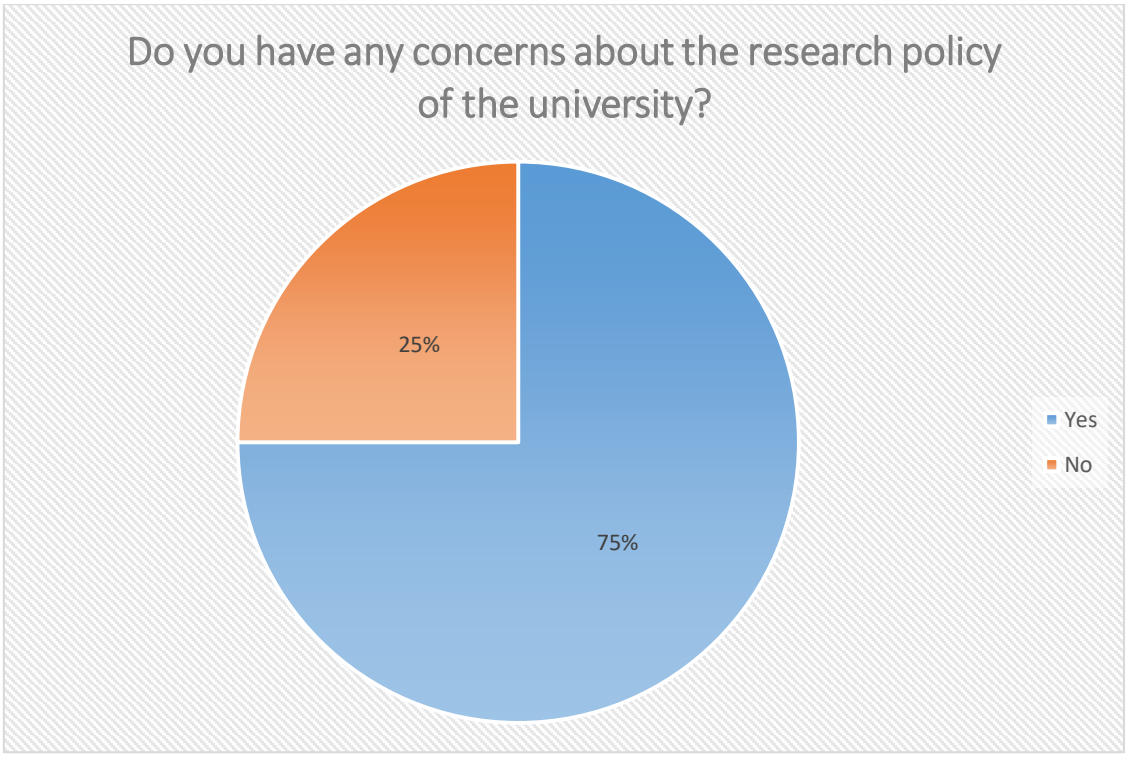

Figure 12. The Participants' Responses about Research Policy of the University

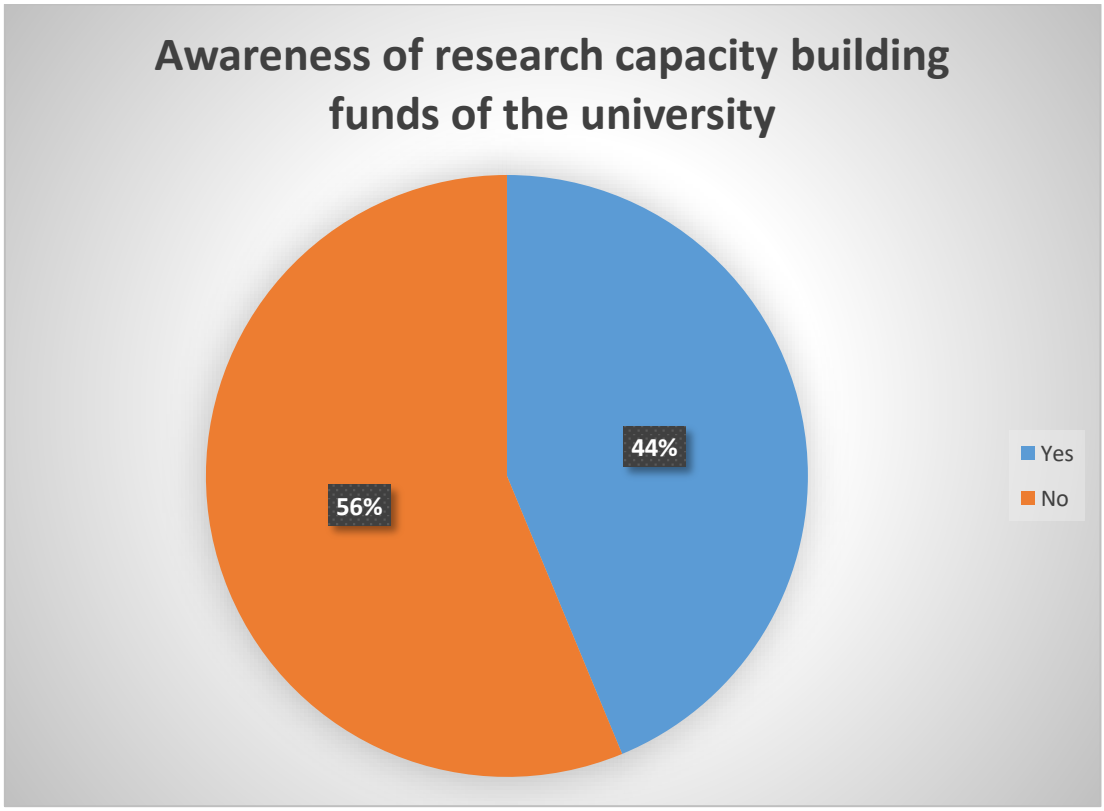

Figure 13. Distribution of the Awareness of Research Capacity Building Funds of the University

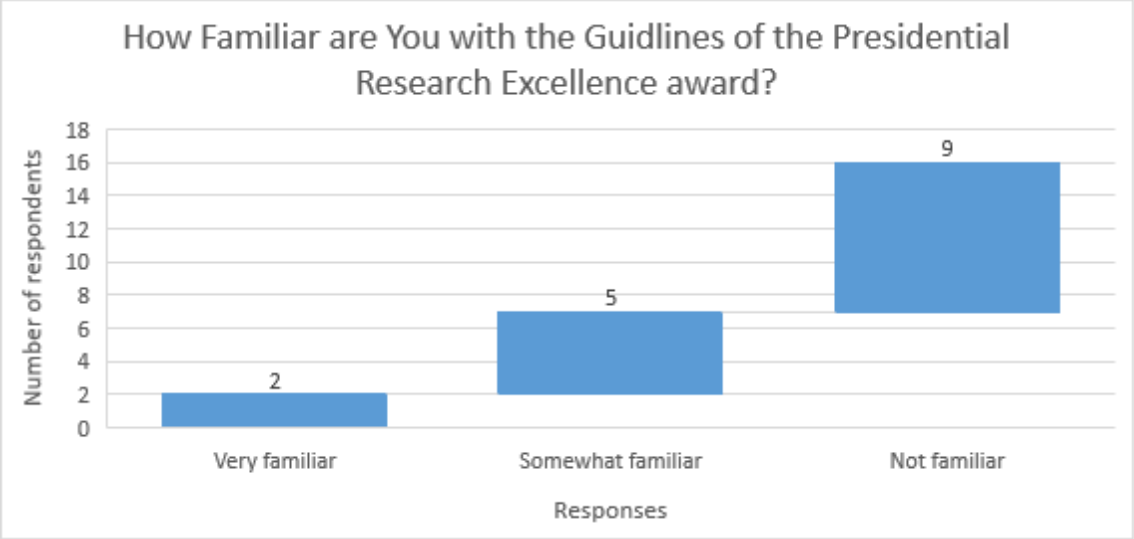

Figure 14. Familiarity with Guidelines of Presidential Award for Research Excellence

Figure 15. Invitation to Research Supervisors' Training

Table 2. Perceived Barriers to Knowledge Translation

Barriers	**Not a barrier**	**Somewhat a barrier**	**Moderately a barrier**	**Extreme barrier**
Lack of awareness of knowledge translation concepts	4 (25%)	7 (4.8%)	2 (12.5%)	3 (18.8%)
Lack of delivery of research results to Decision Makers	2 (12.5 %)	7 (4.8%)	4 (25%)	3 (18.8%)
Little or no communication between researchers and policy makers	1 (6.3%)	3 (18.8%)	4 (25%)	8 (50%)
Mistrust between researchers and policy makers	1 (6.3%)	8 (50%)	6 (37.5%)	1 (6.3%)

Inappropriate research priorities in comparison to current health needs	0 (0%)	4 (25%)	5 (31.2%)	7 (48.8%)
Low or no research budget for Knowledge translation	1 (6.3%)	6 (7.5%)	2 (12.5%)	7 (48.8%)
Research results are not applied to decision making	1 (6.3%)	6 (7.5%)	2 (12.5%)	7 (48.8%)

Discussion

Barriers To Research Productivity Among Faculty Members

Research productivity is essential for advancing knowledge and improving healthcare delivery in the health professions. The current study however identified some challenges associated with research output and knowledge translation among faculty members. Among the respondents of this study only 25% are holders of Doctor of Philosophy degree. Possession of a PhD appears to have a positive impact on research productivity. This is the result of a study conducted among faculty members of a dental school in Malaysia. The investigators concluded that more years in academia and a PhD degree favours research productivity therefore they recommended that postgraduate research training should be encouraged to enhance research output [10].

Time Constraint for Research

Lack of protected time for research is perceived as a barrier to research productivity among the respondents of this study. Several other studies have examined the barriers to research output among faculty members. Lack of time is consistently identified as the largest barrier to research activity [11]. Most of the respondents for the current study are faculty members from the nursing department. Other related studies have reported that nursing faculty members often face various barriers that hinder their ability to conduct scientific studies with lack of time being a significant one. Heavy workloads, competing responsibilities, and the demanding nature of clinical and academic roles can all contribute to time constraint, significantly impeding nursing faculty members' research productivity. The literature has well-documented the lack of time as a barrier to research output among nursing faculty members. For instance, [12] identified poor staffing resulting in high workloads and lack of time for research productivity. Nursing faculty members often have demanding responsibilities, both in the clinical and academic realms. These responsibilities include teaching, clinical practice, supervising students, and administrative tasks. One significant barrier to research output is the shortage of nursing faculty. Most nursing faculty members come from a clinical background with limited preparation for the faculty role, which hinders their ability to engage in research [13]. The shortage of faculty also impedes nursing research and practice development, as it limits the availability of mentors and resources for junior faculty members [13]. Shortage of time to conduct research is a recurring impediment to research output [14, 15, 11]. Protected time for research can facilitate the completion of research projects [16, 17] found that protected research time was positively associated with the completion of research projects among academic faculty members in the United States. The authors noted that protected time allowed faculty members to dedicate sufficient time to their research projects, thereby enhancing their chances of completing their projects on time. [18] found that protected time for research was positively associated with research productivity among academic faculty members in the United Kingdom. The authors noted that protected time allowed faculty members to focus on research activities without being distracted, thereby increasing their research output. In a study in a

Mediterranean nation (Iraq) a study was conducted among faculty members of two nursing colleges to identify barriers to research. The top barrier reported was lack of time [19]. Barrier to research among postgraduate lecturers in Dentistry was like other faculty members namely "lack of time due to other commitments" [11]. The findings showed that around personal obstacles, the lack of time and business factor had the highest average score [20] The respondents of a research among academic staff at five Sudanese medical faculties reported "lack of allocated time" for research work as a barrier to research. Similarly lack of time due to teaching workload constitutes a hindrance to research in a Malaysian nursing school [21, 22]. A study was conducted to identify barriers to research productivity among gastroenterologist in Saudi Arabia. The investigators performed multivariate analysis to examine associations between diverse factors and research productivity. It was concluded that the top barrier to research is insufficient time [23]. Both Institutional factors and Individual factors seem to play a role in research productivity. Family-related responsibilities impeded research productivity among females [24]. Motivation to conduct research and increasing lecturers' esteem were found to be facilitators to research productivity [25]. Institutional support and research policies such as enabling an environment for research, training courses and mentorship are more attributed to research productivity compared to individual factors [26, 1, 27] explored determinants of research productivity at a Kenyan Technical university. The investigators found that insufficient funding, lack of motivation, time constraint and lack of equipment are impediments to research output in the university [27]. A consistent barrier to research output among faculty members in most of the studies on this subject seems to be lack of time. Among the respondents of a similar study, those without a single published paper constituted 57%. Some of the reasons given for not having any published papers were "no writing experience, high publishing fee, and long waiting period for peer review. Surprisingly the participants of this study conducted in Nigeria did not perceive lack of time as an impediment to research [28]. Another significant finding of this study is the low research publication rate among the respondents. Most of the respondents published only one research article in the last two years, completed a research project in the last five years but have not been published, and consequently, they are not satisfied with their research output. Similar findings were observed in other studies. For instance, [29] reported that health researchers from low-income countries are underrepresented in research publication and therefore recommended interventions to improve research publications. Majority of the respondents of this study opined that teaching responsibilities take priority over research at this university. This finding is like the findings of other studies. Teaching responsibilities can have a significant impact on the research output of faculty members [30]. The allocation of time for teaching, including class preparation, lectures, and grading, can limit the time available for research activities. This can result in delays in completing research projects and a decrease in the number of publications produced [30]. Teaching responsibilities also divert attention and energy away from research activities [30]. Faculty members may need to invest time and effort in developing their teaching abilities, which can take away from time that could be devoted to research. Additionally, teaching responsibilities often involve interacting with students, advising, and mentoring them, and participating in departmental and institutional committees and meetings. While these activities are important, they can be time-consuming and distract faculty members from their research pursuits [30].

Time Management for Research Productivity

A preponderance of the respondents of this study spends less than 2 hours weekly doing

research work. This is less than the time required officially by the university for doing research work. Could this suggest challenges with time management? Time management competencies play a crucial role in the research output of faculty members. Effective time management allows faculty members to allocate sufficient time and attention to their research activities, leading to increased productivity. Research has shown that time management skills positively influence research productivity among faculty members [31]. A mixed method study conducted by [17] at an African university indicated that faculty members need personal development and time management skills among other competencies. Faculty members who possess strong time management skills are better able to prioritize their tasks, set realistic goals, and allocate dedicated time for research activities. This enables them to effectively manage their workload and balance their teaching and research responsibilities [31]. Organizational skills help faculty members in planning and structuring their research projects, managing data and resources, and meeting deadlines [32]. Effective organization skills enable faculty members to streamline their research process and ensure that they stay on track with their research goals. Balancing responsibilities in teaching, scholarly activities, clinical practice, and service is another critical aspect that requires effective time management competencies [33]. Effective time management enable faculty members to allocate sufficient time for each of these responsibilities, ensuring that none of them is neglected. Furthermore, time management competencies are also important in managing interruptions and maintaining focus on research tasks.

Research Team and Research Output

Most of the respondents in this study expressed a desire to join a research team as they believe that teamwork will enhance their research productivity. Being part of a research team can have a significant impact on research output, as it allows for the sharing of resources, knowledge, and expertise, as well as the division of labour and workload distribution. Collaborative environments fostered by research teams can also encourage creativity and innovation, leading to higher quality research outputs [34]. Collaboration among faculty researchers can also enhance the dissemination and impact of research findings. According to a study by [35], papers with multiple authors tend to receive more citations than papers authored by a single individual. The study suggests that collaboration can lead to higher-quality research and more innovative ideas, which are more likely to be recognized and cited by other researchers. Research has consistently shown that effective teamwork enhances productivity, creativity, and the overall success of research projects [36]. Transdisciplinary research emphasizes the integration of knowledge from various groups, including scientists, policymakers, and regulators [37]. By incorporating different epistemologies and engaging in collaborative practices, research teams can address complex societal challenges more effectively [37]. Moreover [38] posited that the research teams are better in terms of output and citations compared to single-author researcher, with multi-authored publications being cited more frequently than single-authored publications ultimately increasing their research output. Research teams provide a supportive and collaborative environment that fosters creativity and innovation. The exchange of ideas and feedback among team members can lead to new insights and approaches to research questions, resulting in higher-quality research outputs and innovative solutions to complex problems [34]. Moreover, collaborative environments fostered by research teams can encourage the dissemination and impact of research findings. Research teams usually possess a wider network of collaborators and connections, which can help to disseminate research findings to a broader audience, including other researchers, policymakers, and stakeholders.

Mentorship And Research Productivity

Nearly all respondents in this study agree that research mentorship can significantly enhance research their output. The lack of mentorship and guidance is identified as a critical barrier to research productivity and output. Early-career researchers require guidance and mentorship from experienced researchers to develop their skills, design rigorous studies, and navigate the publication process. [39] identified lack of mentorship and guidance as a significant barrier to research productivity and output among nurse academics. The study found that mentorship and guidance improve researchers' confidence and motivation, leading to higher research output.

Motivation For Research

The study's findings reveal that the primary motivation for research among the participants is to contribute to health service and health policy. Interestingly, the study also found that none of the participants are motivated by promotion, financial incentives, or gaining prestige. One key motivation for conducting research among academicians is career advancement. Research productivity is often a significant factor in academic promotion and tenure decisions, and therefore, academics may be motivated to conduct research to advance their careers [40]. Research can lead to external funding opportunities, which can further enhance academic reputation and career prospects. But none of the respondents of this study reported these advantages as a motivation for engaging in research. Recent research has also identified the importance of intrinsic motivation for conducting research among faculty academics. For instance, [40] found that intrinsic motivation was a stronger predictor of research productivity among faculty members than extrinsic motivation. Intrinsic motivation, such as the enjoyment of the research process or the desire to learn new things, was found to be a more sustainable and fulfilling source of motivation for conducting research. Additionally, research can positively impact teaching and clinical practice, which in turn can motivate academics to engage in research activities. Research findings can inform teaching methods curriculum development, clinical practice guidelines, and interventions [41].

Knowledge Translation (Kt) Among Faculty Members

The most common barrier to KT, as perceived by respondents, is "having little or no communication between researchers and policy makers". The lack of effective communication between researchers and policy makers is a common barrier to knowledge translation, hindering the utilization of evidence-based information for shaping policies and programs, ultimately limiting the impact of research findings on real-world issues. Despite the abundance of information available to guide policy formulation, the transformation of information into actionable policies and its successful implementation in public health initiatives remain significant challenges [42]. Translation of research evidence into actionable policies and its successful implementation in public health initiatives remains a challenge despite the abundance of available information to guide health policy formulation [43]. One major hurdle is the lack of effective communication among researchers, healthcare professionals, and policymakers. [42] underscored the need for collaboration between researchers and decision makers. Researchers and policymakers often operate on different timelines and have different agendas. Researchers require longer timelines conduct rigorous research design, data collection, analysis, and peer review. In contrast, policymakers frequently face time-sensitive demands to address pressing issues and make prompt policy decisions. This discrepancy in timelines can create a mismatch between the availability of research evidence and the immediacy of policy needs, making it challenging for policymakers to wait for comprehensive results of scientific study [44].

One advantage of discussions between health researchers and policy makers is that they can improve the relevance and impact of research. Policymakers' insights into current health policies and practices can help researchers to align their research questions and designs with the needs of policymakers and their constituents [45], enhancing the usefulness and applicability of research for policy decisions. Discussions between policy makers and researchers can facilitate evidence-based policy decisions. Health researchers can provide policymakers with the latest evidence on the effectiveness of health interventions and policies, helping them to make informed decisions that are based on scientific evidence rather than personal or political opinions [45]. Moreover, discussions between health researchers and policymakers can enhance the dissemination and implementation of research findings. Collaboration allows for the identification of effective strategies to share research results with policymakers and ensure that they are translated into health policies and practices [45]. As a result, this can increase the likelihood of research findings being put into practice and having a positive impact on public health. Policymakers can provide insights into areas of policy where evidence is lacking, and researchers can use this information to guide their research agendas and prioritize areas of research that are most relevant to policy [45]. The absence of communication between health researchers and policy makers can lead to several drawbacks that can ultimately affect public health outcomes. These drawbacks include an absence of synchronization between research and policy, uninformed policy decisions, and a failure to translate research findings into policy and practice. When discussions do not take place, researchers may not be aware of current policy priorities, and policymakers may not be informed of the latest research evidence. As a result, research questions and designs may not align with policy needs, and policies may not be based on the most recent scientific evidence. This can lead to research that has limited relevance to policymakers and policies that have little impact on public health outcomes [45].

Another disadvantage of the lack of communication between health researchers and policy makers is uninformed policy decisions. In the absence of discussions, policymakers may make decisions based on personal or political opinions rather than evidence-based information. This can lead to policies that are not effective, inefficient, or even harmful to public health [45]. Moreover, the absence of communication can lead to a failure to translate research findings into policy and practice even when the evidence is available. Without discussions, the research may not be effectively translated into policy and practice, which can result in research findings having limited impact on public health outcomes and missed opportunities to improve public health [45].

The Need for Training in Knowledge Translation Among Faculty Members

A significant number of respondents in this study expressed the need for Knowledge translation training. Knowledge translation (KT) is the process of moving research evidence into practice, policy, and decision-making. Many researchers have not been trained in KT, which can limit their ability to effectively communicate their research findings to decision-makers and stakeholders. A study of 405 Canadian health researchers revealed that only 30% had received training in KT, and only 10% reported feeling well-prepared to engage in KT activities [46]. KT training can improve research impact. Research has shown that KT training interventions have led to significant improvements in knowledge, skills, and attitudes related to KT among researchers, thus improving the likelihood that research findings will be used in health policy and practice. A systematic review of 35 studies found that KT training interventions led to significant improvements in researchers' ability to engage in KT [47]. There

are several barriers to providing KT training to researchers, including lack of resources, time, and incentives. A survey of 242 Australian researchers found that the most common barriers to engaging in KT activities were lack of time (77%), lack of funding (63%), and lack of incentives (47%) [48]. Collaboration between researchers and knowledge users, such as policymakers and practitioners, can facilitate the translation of research evidence into practice. Strong evidence suggests that KT platforms support the use of research evidence in health decisions in low and middle-income countries [49]. A survey of Canadian health researchers found that only 30% had received training in knowledge translation, and only 10% felt well-prepared to engage in knowledge translation activities [46]. Similarly, lack of training has been identified as a barrier to engagement in knowledge translation activities among nursing faculty members in the US, with only 27% reporting feeling confident in their ability to engage in such activities [50]. Lack of training has also been identified as a barrier among faculty members in medical schools in the US with only 37% reporting having received training in knowledge translation [51].

Insufficient Communication Between Policymakers and Researchers

A major obstacle to converting research findings into substantial policy decisions is a lack of good communication between researchers and policymakers. This divide eventually reduces the influence of research on real-world issues by making it more difficult to use evidence-based information to modify policies and initiatives. This lack of communication is caused by several factors, such as faculty members' lack of knowledge translation training and obstacles including time, resources, and incentives. Each of these elements has implications on both research and health policy.

Various Schedules and Plans: Longer deadlines are frequently followed by researchers since they are necessary for meticulous study design, data collecting, analysis, and peer review. On the other hand, legislators are frequently under pressure to act quickly to resolve urgent matters and make policy decisions. The mismatch between the availability of research findings and the urgency of policy demands resulting from this timetable disparity might make it challenging for policymakers to wait for thorough research outcomes [44].

Jargon and Communication Styles

Policymakers and researchers frequently speak in different languages. Although scholars may employ technical jargons and complex terminology specific to their field of expertise, decision-makers need succinct, comprehensible material that directly tackles policy issues. This discrepancy in communication styles might cause miscommunications and impede the efficient utilization of knowledge [52].

Lack of Involvement with Stakeholders

It is imperative to involve stakeholders in the process of determining research priorities, including patients, healthcare providers, lawmakers, and community members, to guarantee that research is in line with practical demands. Research findings and practical application may not align if these stakeholders are not included [53]. Almost all the participants in a descriptive qualitative study on KT practice among Manitoban health researchers use dissemination as their primary method of KT practice, as opposed to cooperation [54]. The researchers also pointed out that better funding policies and training programs are required for KT operations. Research priorities were not jointly determined by researchers and decision-makers, according to a mixed-methods study of KT activities involving 88 Iranian health researchers. Individual interests guide the themes that the researchers select. The publishing of study publications in journals and presentations at conferences and seminars were

two ways that the participants were informed about the research findings [55]. This suggests that at the start of the research project, there was no cooperation between the researchers and stakeholders. In a qualitative study, [56] investigated how scholars and decision-makers in Uganda's public health system see the significance of evidence-based policymaking. The researchers concluded that while policy ought to be informed by research findings, this does not always happen.

Conclusions

Overall, the research output of faculty members of this university is low while Knowledge Translation among the respondents is extremely low. They indicated interest to be trained in KT. Most of the faculty members are dissatisfied with their research output. Although the faculty members do supervise research projects or their students, but very few were submitted for publication. Some of the factors responsible or these findings includes lack of sufficient motivation for research, need for protected time for research, and inability to balance research work with teaching activities. Most of the respondents are not familiar with the research policy of the university and have concerns with the research policy of the university and finally majority of the research participants indicated interest to be part of a research team.

Conflict of interest

The author has received no funding from any organization for this study as such there is no conflict of interest.

Acknowledgement

The author would like to acknowledge the supportive guidance of the research supervisor Dr. Audrey Gittens as well as Jerry Joel and Ewan Brooks for technical support.

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