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Research challenges among higher education teachers: basis in developing policy intervention

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ABSTRACT

This study was conducted to determine the different research challenges being faced by the faculty-researchers in Isabela State University-Echague, Isabela. Data were gathered using survey questionnaire. The study revealed that most of the respondents were female, married and with master's degree. Further, most of the respondents were Instructors and Assistant Professors. As to the perceived challenges, it was found that faculty-researchers have difficulty in choosing the appropriate statistical tool for their research and writing research report. In addition, the respondents also experience challenges like delay in the issuance of designations, long process for the approval of the research proposal and disbursement of allotted funding. In addition to this, the study also revealed that female faculty who are married and with lower academic rank and academic achievement has higher observation on the different challenges in doing research than their counterparts.

RESUMO

Este estudo foi realizado para determinar os diferentes desafios de pesquisa enfrentados pelos professorespesquisadores da Isabela State University-Echague, Isabela. Os dados foram coletados por meio de
questionário de pesquisa. O estudo revelou que a maioria dos entrevistados era do sexo feminino, casada
e com mestrado. Além disso, a maioria dos entrevistados eram instrutores e professores assistentes.
Quanto aos desafios percebidos, constatou-se que os docentes-pesquisadores têm dificuldade em escolher
a ferramenta estatística adequada para suas pesquisas e redigir o relatório de pesquisa. Além disso, os
entrevistados também enfrentam desafios como o atraso na emissão das designações, o longo processo de
aprovação da proposta de investigação e o desembolso do financiamento atribuído. Além disso, o estudo
também revelou que as docentes do sexo feminino, casadas e com classificação académica e desempenho
académico mais baixos, têm maior observação sobre os diferentes desafios na realização de investigação
do que as suas homólogas.

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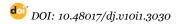


Keywords:

research challenges, academic freedom, research challenges, institutional development

Keywords:

desafios de pesquisa, liberdade acadêmica, desafios de pesquisa, desenvolvimento institucional



Introduction

In a fast-changing society with vast of information and technologies, research is essential. Research is used as basis for social development, policy formulation, improvement of the teaching and learning process, and a strong indicator for sustainable and economic development. In its 2030 Agenda, the UNESCO underscored the importance of research in the achievement of its Sustainable Development Goals (SDG). UNESCO emphasizes that sustainability in research and education will result in new knowledge, technology, innovation, and holistic understanding which will allow societies to better address global and local sustainability challenges. Through research and education, social problems can be solved through interdisciplinary approach which will integrate various social dimensions to make concrete contributions to sustainable development.

In the creation of new knowledge, technologies and services, research is an indispensable factor. Research provides scientific and logical explanation to various phenomena, problems and issues in the areas of economics, politics, governance, education, family, and the like. According to Islam and Samsudin (2020), research is a creative way of creating knowledge and it is a vital and powerful instrument towards progress. In addition to this, Kamogelo and Lucky (2022), explain that research can positively impact the society since it is a practical finding on a specific problem. Zarah (2018) recognizes the importance of research in developing new information that may help in the present and perennial problems of the society. Moreover, research in the context of the academic arena, is highly important for it provides avenue for new knowledge to be discussed and analyzed. Moreover, UNESCO (2023) further exemplify that research is a key factor in economic growth and sustainable development and it positively impacts the various sector of the society including education. Countries of the world, regardless of size and economic condition perceive research to be a vital tool to survive in a highly competitive global community.

In the Philippines, public and private universities are expected to conduct research and disseminate their findings through conferences and journal publication. Technology transfer from researches is also expected to be a responsibility of any Philippine Higher Education Institutions (HEI's). Acerit (2016), explains that while the country is pushing towards ASEAN integration and internationalization, there is a need for universities to be at par with other Asian and global universities through the conduct of research in various disciplines. In addition to this, Rosowsky (2022) claimed that the best universities are those with faculty engaged in research and disseminate their findings through daily teachings. Further, through these researches, the advancement of today's civilization is ensured, hence, most universities all over the globe include the conduct of research in their vision and mission.

Research is one among the four thrust of the University along with community development, instruction, and resource generation. Generally, the Isabela State University envisions itself to become a leading Research University in the country and in the ASEAN Region. According to CHED through the creation of NHERA, research is a prime responsibility of all state universities in the country and it is founded on the principle of "academic freedom" where faculty are expected to create and profess new information and knowledge through research and that these information and knowledge be transferred in the community. By this, the University requires its faculty and staff to conduct research in the different fields and the result of which are expected to be extended to different community. For Bautista (2021), research is becoming one of the most needed criteria for university faculty to be retained and promoted. In addition to this, research activities among faculty of higher education can be used to response to the various Sustainable Development Goals (SDG) of the United Nation. Particularly, quality education (SDG 4), gender equality (SDG 5), and partnership for the goals (SDG 17).

Teachers, being one of the assets of the University, are expected to produce quality research which are expected to be used for institutional and community development. In relation to this, researches of faculty are presented in local, national and international research conferences. Further, various researches are published in refereed journals. However, faculty researchers are facing different challenges in the pursuit of quality research. According to Bullo, et al. (2021), the conduct of research becomes one of the most challenging experiences among teachers. As per record of the university, only few approved researches were completed and presented in the University Agency In-House Review and only few faculty are engaged in research related activities. Cornelio (2023) discussed that while research is an important factor in social development, there have been various problems why teachers have limited engagement to research activities. Some of the factors are heavy teaching loads, inadequate research facilities, lack of funds, delays in procurement, etc. In addition to this, according to Morales et al. (2016) faculty researchers have difficulty in statistics, data organization, literature searching and writing of reports. Further, Ulla (2018) reported that faculty face challenges in doing research such as lack of financial support, heavy teaching loads, lack of research skills and knowledge and lack of research materials and resources. Also, several researches show that faculty are moderately capable of preparing research output (Abarro, 2016; dela Cruz, 2016; Acerit, 2016).

To become a leading research university, there is a need for Isabela State University to provide policy which will aid the faculty to improve their knowledge and skills in conducting, writing, presenting and publishing their research. The presence of a defined policy will provide clear framework and procedure for the research and development unit to annually conduct related activities and support existing and programs for faculty development in research. As discussed by Lazo (2024), that teachers' influece exceed beyond the four coners of the classroom. They do not just influence the learning of the students but the attainement of

organization goals and objectives. Hence, to be a leading research university, there is a need for policies focused on faculty development.

In response to the call of developing a research university in the country and the ASEAN Region, this study was conducted to determine the different challenges faced by faculty researchers of the Isabela State University, Echague campus. This study explored the different experiences of research faculty in doing research. The findings of the study were used to proposed intervention policy with the aim of enhancing the research production of the university towards the attainment of the University vision and mission.

Objectives of the Study

Determine the profile of the respondents based on the following: gender; civil status; academic rank; highest educational attainment. Identify the challenges in doing research faced by the faculty of Isabela State University. Analyze the relationship between the respondents' profile and the challenges in doing research.

Review of Related Literature

Research has a profound impact to social and economic development. Research is a crucial component of advancing knowledge and building a better society since it is a logical process that aims to gain new perspectives and validate preexisting views and biases in order to enhance society (Wagas, *et al.*, 2024; Islam, 2023; Janer, *et al.*, 2022). Islam & Samsudin (2020) further exemplified that all forms of development started with questioning the existence of something and thereby research was born to aid humans towards progress and development.

To move forward, any social institutions need the assistance of research from policy development to program implementation and evaluation. For instance, Donayre, *et al.* (2020) clearly explained that research is direly in need in public and private administration especially for policy reforms, including evaluation of organizational performance.

In the sector of education, research is a requisite for higher education institutions. In the National Higher Education Research Agenda published by the Commission on Higher Education (CHED), the role of university in national development is very important. Philippine universities for this matter are viewed to be a knowledge producer through research and a laboratory of the country's future workforce. CHED recognizes the important role of the different universities in the creation of new knowledge and technologies, not just to contribute to existing body of knowledge but to help improve the social and economic conditions of the Filipino people. According to Quitoras & Abuso (2021), sustainable research culture is essential towards the attainment of the university's mandates and responsibilities which includes instruction, community development. Even the Department of Education in its Order No. 39, s. 2016 recognized the importance of research in improving the basic education sector of the Philippines. For the Department, through research, existing and perennial problems in the

educational sector may be given proper solutions towards maintaining the progressive approach in improving the overall basic education of the country. Moreover, the Department commits itself to pursue innovations using evidenced-based solution through research.

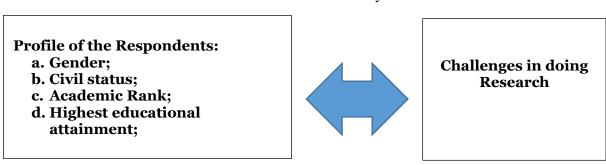
The Isabela State University, as a university for people and nature envision itself to become a leading Research University in the ASEAN Region. By this, the university exerts its effort to produce knowledge and technologies along the areas of agriculture, renewable energy and biofuels, climate change and disaster science, biodiversity and environment, farm mechanization, socio-economics and higher education. To achieve this vision, the university provides various mechanism to allow its faculty and students conduct research along their field of specialization.

For faculty, the conduct of research is part of their responsibility and commitment to the university's mandate, including the improvement of their craft in teaching and for professional development. Aside from this, Ulla (2018) explained that doing research, it may help the teacher improve their daily teaching process. Moreover, faculty researches, according to Perez, et al., (2022) will be beneficial to find solutions to existing classroom-based problems or even the issues and concern of the larger education system. Through research, teachers can be able to introduce innovation in the classroom making learning for inclusive and equitable. In addition, research is an important factor for the promotion of faculty thereby improving their professional development. In the latest Joint Circular (JC) No. 3, s. 2022 of the Commission on Higher Education (CHED) and Department of Budget Management (DBM), research is an increasing requirement for faculty promotion. Meaning, the higher the academic rank of a faculty, the higher the research requirement for them. For a full-pledged professor, 40% of their accomplishment should be in research, 30% should be in instruction, 20% should be in extension and 10% should be professional development. Through this joint circular, the imperative of doing research in higher education is given so much emphasis.

Using the JC 3, s. 2022 as a framework for promotion and professional development among faculty of higher education, faculty will either exist or persist in the university. There is a higher tendency that faculty who are engaged in the different research activities will have higher chances of being promoted than those who do not have participation in any research activity. Aside from this, according to Batoon (2022), research is an important factor in passing the various accreditation level of the Accrediting Agency of Chartered Colleges and Universities in the Philippines. In this case, faculty involvement in research will affect the overall performance of the university and the professional development of the faculty itself. Therefore, faculty research capability is not the sole responsibility of the faculty itself or the university. The university should provide avenue to aid the faculty develop their research capability while the faculty should be motivated and encouraged to develop their research skills through various programs that may be offered by the university.

The research productivity of the faculty as a responsibility by both the university and the faculty can be anchored on the theory of Integrated Theoretical Model of Research Productivity (ITMRP) published by Nygaard in 2017. The model asserts that research productivity is ensured through negotiation between the institution and the researchers as affected by various competing constraints such as the researcher's self-identification (abilities, desires, fears), interpretation of institutional environment and their perception of the agency where they belong. By doing negotiations and considering the different individual and institutional factors, decisions and practices may be developed and implemented. Practices in this case may focus on the concept of what to develop, how to develop and to what extent is the expectation in the development of researches. The indicators of successful negotiation will reflect on the number and quality of research papers of the faculty. Ultimately, the ITMRP model focusses on the assertion that in order to improve research productivity among faculty, considerations should be given by the university and the faculty to meet into equilibrium. If the competing constraints are will not be addressed, research productivity will suffer, and consequently the performance of the university and the professional development of the faculty will suffer.

Figure 1. Framework of the Study



The framework of the study reflects the main objectives of the research which is to assess the challenges in doing research among the faculty members of Isabela State University-Echague Campus. This is anchored on the Integrated Theoretical Model of Research Productivity (ITMRP) where negotiation is an essential factor towards research productivity. The study attempted to unveil challenges in doing research based from the experiences of faculty-researchers. Looking at various factors in doing research such as technical knowledge and skills, mentorship including administrative procedure such as approval of research proposal and disbursement of funds, the university may use this to properly addressed issues and problems and may be used to provide solutions.

Methodology

The research was conducted in Isabela State University (ISU) Echague Campus. ISU is a Level 4 State University offering various undergraduate and graduate programs in the areas

of agriculture, business, education, arts, sciences, information technologies, engineering, etc. The university has nine (9) campuses and two (2) extension units which are strategically located in the different parts of the province of Isabela. Among the campuses, Echague, the locale of the study is the main campus. It also a home for nine (9) colleges. To date, the university is catering an average of 28 thousand students, around 800 faculty and more than one (1) thousand non-teaching and non-academic staff. As a higher learning institution, research is one among the mandate of the university along with instruction, community development and resource generation.

Generally, the study used descriptive correlational design of research. Data about the respondents' profile and their assessment on research challenges were treated using descriptive statistics like frequency, percentages, and mean. On the other hand, the relationship between the respondents' profile and their assessment on research challenges were treated using inferential statistics, specifically, Kendall tau b. The respondents of the study were the randomly selected faculty of ISU Echague who willingly gave their consent to participate in the study. The total sample size of the study was 122 which was computed using the 95% confidence level and 5% margin of error. Data of the study were collected using a questionnaire through survey technique. The questionnaire for the challenges in doing research was adapted from Ulla (2018). Modification was made to suit the context of Isabela State University. Data were processed through the Statistical Package for Social Science (SPSS). A Likert-scale was used in the study. This is shown below in Table 1:

Table 1Data processed through the Statistical Package for Social Science (SPSS).

Scale	Range	Description
5	4.50-5.00	Strongly Agree
4	3.50-4.49	Agree
3	2.50-3.49	Fairly Agree
2	1.50-2.49	Disagree
1	1.00-1.49	Strongly Disagree

Results

The frequency distribution of the respondents based on their profile. It can be gleaned from the table that there were 73 or 59.84% female faculty and 49 or 40.16% male faculty of who participated in the study. As to the civil status of the respondent, most of them are married with a frequency of 77 or 63.11. Further, there were 39 or 31.97% of the respondent who are still single while there were six (6) or 4.92% of the faculty-respondents who are widow. Presents in Table 2

It can also be gleaned from the table that most of the respondents were master's degree holders or doctorate degree holders. Based on the table, out of the 122 respondents, 48 of them are master's degree holders, and 29 faculty-respondents are doctorate degree holder. Also, there are 23 faculty who are pursuing their master's degree while 22 faculty are pursuing their doctorate degree.

Table 2. Profile of the Respondents

Profile	Frequency	Percentage		
	n=122	(100%)		
Gender				
a. Male	49	40.16		
b. Female	73	59.84		
Civil Status				
a. Single	39	31.97		
b. Married	77	63.11		
c. Widow	6	4.92		
Highest Educational Attainment				
a. With Master's Unit	23	18.85		
b. Master's Degree	48	39.34		
c. With Doctorate Unit	22	18.04		
d. Doctor's Degree	29	23.77		
Academic Rank				
a. Instructor	37	30.32		
b. Assistant Professor	33	27.06		
c. Associate Professor	29	23.77		
d. Professor	23	18.85		

In terms of academic rank, most of the respondents are holding instructor and assistant professor rank. There were 37 faculty who are holding instructor position, 33 faculty who are holding assistant professor rank, 29 faculty are holding associate professor rank while 2 respondents are holding full professor rank.

Table 3 presents the perceived challenges being by the faculty in the conduct of research. It can be gleaned from the table that the faculty strongly agree that faculty researchers face challenges such as delay in the issuance of designations and budget allocation and the disbursement of the approved budget is tedious and laborious. Further, they strongly agree that the process of research approval from campus to university level is very long. In terms of technical skills, it is perceived by the respondents that the faculty have difficulty in writing the research report/paper and in choosing the appropriate statistical tool. This perception is based from the result of the mean rating ranging from 4.60 to 4.90.

It can also be gleaned from the table that the respondents agree with the challenges faced by the faculty researchers such as lack of sufficient reference materials in the library, lack of research resources such as facilities, equipment, and workplace. The respondents also agreed that there is no mentoring between the senior and junior research faculty, there is a lack of financial support, the faculty are heavily loaded from FTE and quasi-designations and not all types of research are appreciated during the proposal presentation. This perception is manifested by the result of the mean rating ranging from 3.70 to 3.86.

Table 3.Challenges in the Conduct of Research in Isabela State University as Perceived by the Respondent

Respondent					
Statement	Mean	Description			
1. Faculty lacks the following technical skills:					
a. Formulation of problems	3.28	Fairly Agree			
b. Literature searching	3.34	Fairly Agree			
c. Choosing proper research design	3.36	Fairly Agree			
d. Choosing appropriate statistical tool	4.60	Strongly Agree			
e. Data analysis and interpretation	3.44	Fairly Agree			
f. Writing research report	4.58	Strongly Agree			
2. Lack of sufficient reference materials in the library					
	3.79	Agree			
3. Lack of research resources such as facilities, equipment,					
workplace, etc.	3.86	Agree			
4. Very long process of approval from campus to university		_			
level	4.79	Strongly Agree			
5. No mentoring between senior and junior research	3.70	Agree			
faculty					
6. Lack of financial support	3.57	Agree			
7. Disbursement of budget is tedious and laborious	4.86	Strongly Agree			
8. Delay in the issuance of designation and budget					
allocation	4.90	Strongly Agree			
9. Heavily loaded from FTE and quasi-designations					
	3.87	Agree			
10. Age factor	3.21	Fairly Agree			
11. Ethical issues	3.28	Fairly Agree			
12. No training or workshop to enhance research					
capability	3.32	Fairly Agree			
13. Not all type or researches are appreciated and/or	0 0	, 0			
entertained during proposal presentation					
	3.81	Agree			
14. The expertise of the panel of evaluators during	J	O			
research presentation is different from the nature of					
research presented	3.35	Fairly Agree			

The respondents of the study fairly agree that in terms of technical skills, the respondents have difficulty formulating the research problem, literature searching, selection of proper research design, and data analysis and interpretation. Further, the respondents fairly agree about the challenges faced by faculty researchers such as age factor, ethical issues, absence of trainings and workshops that may enhance the research capability and the expertise of the evaluators during the research presentation is different from the nature of the research being presented. This fair agreement by the respondents is a result of the mean rating ranging from 3.21 to 3.36.

Table 4 shows the relationship between the respondents' gender, civil status, position and educational attainment and their perceived challenges in the conduct of research in ISU-

Echague. It can be gleaned from the table that eight (8) out of 19 statements show significant and positive relationship with the respondents' gender. This is based on the result of the correlational level from 9.40 to 20.13 and significant level from 0.00 to 0.05. It only means that female respondents have a higher observation on the various challenges in the conduct of research than their male counterparts. Female respondents have higher observation on challenges like difficulties on the formulation of research problems, insufficient reference materials in the library, lack of financial support, tedious and laborious process in the disbursement of budget, delay in the issuance of designation and budget allocation, no training or workshop for enhancement of research capability, not all researches are appreciated during proposal review, and the expertise of the evaluator during research presentation is different from the nature of research.

Table 4.

Relationship between Respondents Profile and the Perceived Challenges in the Conduct of Research in Isabela State University.

III ISal	bela State	Univers						
	Gender		Civil Status		Position		Educational Attainment	
Statement								
	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.
1. Faculty lacks the following technical skills:								
 a. Formulation of problems 	11.68*	0.02	-0.22*	0.00	0.53^{ns}	0.48	0.13 ^{ns}	0.86
b. Literature searching	5.66ns	0.22	0.08ns	0.31	0.27 ^{ns}	0.73	0.12ns	0.11
c. Choosing proper research design	$8.76^{\rm ns}$	0.07	-0.22*	0.01	0.46 ^{ns}	0.55	0.64^{ns}	0.41
d. Choosing appropriate statistical tool	7.36^{ns}	0.11	-0.17*	0.04	0.90*	0.01	0.17 ^{ns}	0.82
e. Data analysis and interpretation	4.97 ^{ns}	0.29	-0.20*	0.02	0.46ns	0.33	0.47 ^{ns}	0.54
f. Writing research report	3.39 ^{ns}	0.49	-0.18	0.02	0.55^{ns}	0.06	0.69^{ns}	0.36
2. Lack of sufficient reference materials in the								
library	13.47^{*}	0.01	0.05^{ns}	0.52	0.91 ^{ns}	0.08	0.16^{ns}	0.83
3. Lack of research resources such as								
facilities, equipment, workplace, etc.	$2.59^{\rm ns}$	0.63	0.68^{ns}	0.41	0.92 ^{ns}	0.08	0.11 ^{ns}	0.16
4. Very long process of approval from campus								
to university level	6.20 ^{ns}	0.18	0.32^{ns}	0.69	0.65^{ns}	0.39	0.20*	0.01
5. No mentoring between senior and junior								
research faculty	8.70 ^{ns}	0.10	-0.10 ^{ns}	0.22	0.19 ^{ns}	0.80	0.40 ^{ns}	0.60
Lack of financial support	9.40*	0.05	0.60^{ns}	0.47	0.17 ^{ns}	0.82	0.12 ^{ns}	0.12
7. Disbursement of budget is tedious and								
laborious	12.44*	0.01	-0.15 ^{ns}	0.10	0.19*	0.00	0.13 ^{ns}	0.10
8. Delay in the issuance of designation and								
budget allocation	13.35*	0.01	-0.14 ^{ns}	0.09	0.72^{ns}	0.34	0.83^{ns}	0.27
9. Heavily loaded from FTE and quasi-								
designations	7.85^{ns}	0.09	0.46 ^{ns}	0.57	0.19*	0.00	0.26^{ns}	0.73
10. Age factor	8.36^{ns}	0.80	0.10 ^{ns}	0.22	0.64 ^{ns}	0.40	0.80^{ns}	0.91
11. Ethical issues	15.32^{ns}	0.00	-0.14 ^{ns}	0.09	0.14 ^{ns}	0.85	0.20^{*}	0.01
12. no training or workshop to enhance								
research capability	18.07*	0.00	0.91 ^{ns}	0.26	0.19 ^{ns}	0.80	0.49*	0.05
13. Not all type or researches are appreciated								
and/or entertained during proposal								
presentation	14.66*	0.01	0.06^{ns}	0.46	0.70 ^{ns}	0.36	0.78^{ns}	0.30
14. The expertise of the panel of evaluators								
during research presentation is different								
from the nature of research presented	20.13*	0.00	0.19*	0.02	0.14*	0.05	0.68ns	0.36

ns- not significant

*-significant

The table also shows that the respondents' civil status has a significant but negative relationship with the different challenges faced by the faculty researchers. This is based on the result of the correlation level from -0.17 to -0.22 and significant level from 0.00 to 0.04. the result signifies that there is a significant but negative relationship between the respondents'

civil status and the challenges such as problems with the formulation of research problems, choosing of proper design and statistical tool, and data analysis and presentation and the expertise of the evaluator is different from the nature being presented. This only means that there is a higher probability that married faculty encounter these problems more often than the unmarried faculty researchers.

Table 4 also shows the relationship between the respondents' position and the perceived challenges in the conduct of research in ISU. It can be gleaned from the table that there is a significant relationship between the perceived challenges like problem in choosing the appropriate statistical tool, tedious and laborious process in the disbursement of funds, heavily loaded from FTE and quasi-designations and the expertise of the evaluators is different from the nature of the research being presented. This is based from the result of the correlational level from 0.14 to 0.90 and significant level from 0.00 to 0.05. This implies that there is a higher chance that faculty belonging to lower rank such as instructor and assistant professor have more experiences on these challenges than those faculty handling higher positions like associate professor and professor rank.

The educational attainment of the respondents has a significant relationship with the perceived challenges in the conduct of research. This is based on the result of the correlation level from 0.20 to 0.49 and level of significant from 0.01 to 0.05. Specifically, relationship exists between the respondents' educational attainment and challenges in doing research specifically on long process in the approval of research from campus to university level, age factor and ethical issues. This result implies that there is a higher probability that those faculty with lower educational attainment has higher observation on the various challenges in the conduct of their research. Faculty with lower educational attainment refers to newly employed faculty in the university and with limited research experiences, hence, they may experience more challenges in doing research related activities than those faculty who were able to gained experiences in research through their advanced education.

Discussion

The importance of research in the existence of higher education institutions is crucial. For the Philippines, the conduct of research is given among faculty of any higher education institutions. In this note, the Isabela State University requires its faculty regardless of academic rank to conduct research, extend their research to their communities and publish their researches in reputable journals. However, doing research related activities is not an easy job. Quinto (2022) and Pilongo (2020) explicitly explained that researchers are confronted with different issues and problems along the way such as writing research paper itself, conflicting schedules, and many others.

The research revealed different challenges which the faculty face when doing research. Planning, doing, and writing research paper is not an easy task. For many researchers especially the beginners, have difficulty in the selection of appropriate statistical tools for their research, data organization and writing their research report (Tingabngab & Binayao, 2023; Bullo, *et al.*, 2021; Morales, *et al.*, 2016), literature survey, research presentation and publication (Tindowen, *et al.*, 2019), lack of research materials and resources (Ulla, 2018). For the case of the university, data showed that most of the respondents positively agree that they encounter various technical related challenges in doing research such as the selection of statistical tool to be used, literature survey, and writing of research paper itself. It can be noted that while these are common issues especially among neophyte researchers, these should be given proper attention by the management to further motivate the faculty in doing research.

Perception on doing research is another issue being experienced by teacher-researchers. If teachers develop perception on research as an additional burden because of several issues like lack of mentoring and age factors, it becomes more difficult (Tingabngab & Binayao, 2023; Bullo, *et al.*, 2021). On the other hand, if mentorship or collaboration in doing research will be encouraged among faculty members, it will result to a more positive research environment (Hernandez & Ugalde, 2020; Iqbal, *et al.*, 2018). Data of the study revealed that while age and ethical issues are considered as a minor issue in the university, mentorship should be encouraged between faculty experts and neophyte faculty. This will only not improve the research productivity of the university but also improve camaraderie and research collaboration among the members of the university research community.

In addition to this, research becomes harder because of various administrative procedures which caused the delay of the implementation of research projects or activities (Abrenica & Cascolan 2022). While various procedures are set to ensure proper evaluation of papers and disbursement of public funds, it may impede the implementation of good research projects. Delay in the issuance of designations and fund may negatively affect the completion of the research. In this case, it is highly recommended for the university research department to improve the various processes involved in the issuance of designations and disbursement of fund.

The study also found interesting relationship between the faculty's profile and the challenges they experience in the conduct of research. As to gender, it was revealed in the study that female faculty of the university tend to experience different research challenges than their male counterpart specifically in areas related to writing research paper, lack of trainings, differences of expertise during evaluation, including disbursement of budgets and the like.

It is interesting to note that literatures show that while females dominate the world of scientific works than males (Kwiek & Szymula, 2023; Cabico, 2018), the world of research is still dominated by male (Metha, 2021). However, in the Philippines, data shows that the number of researchers by gender is almost the same. In a report of the Institute of Statistics by

UNESCO (2020), the Philippines has an almost equal number of researchers in the country when they are grouped by gender. Hence, gender disparity in the world of research is an important aspect of research.

Female faculty tend to experience more challenges in doing research. This finding supports existing researches along this line. In the study of Besselaar and Sandstrom (2016), it was revealed that while citation impact is almost equal among male and female researchers, female researchers are lagging behind male researchers in terms of research productivity. In the study of Heng, *et al.* (2020) and Iqbal, *et al.* (2018) revealed also that male researchers have higher tendency of developing more research and becoming more engaged in research-related activities than their female counterparts. Moreover, Santos, *et al.* (2020), found in their study that while female researchers tend to be more organized and collaborative than their male counterparts, they also tend to choose research topics that are less risky and less focused on scientific discovery than male counterparts.

On the other hand, the findings of the present study about female researchers experience more challenges in doing research than male contradicts other existing results in literatures. In the study of Gonzales, *et al.* (2019), it was revealed that while both male and female researchers have perceived themselves to be competent in research, male researchers encountered more difficulties over female. In addition, younger male researchers encountered more difficulties in research than their female counterparts or those older than them. Gonzales, *et al.* (2019) also found out in their study that while male researchers have a better level of competency in research dissemination over female researchers, they also experience more challenges than female researchers especially in the aspect of writing their research paper.

As to civil status, literatures revealed that personal situation may affect the teachers' time and ability in doing research (Feng, *et al.*, 2024). Data of the study revealed that married faculty tend to experience more challenges in doing research than those faculty who are single or unmarried. Heng, *et al.* (2020) explained that the ability to spend more time in doing research can predict higher research productivity which means that when a faculty spends more time learning the art and science of doing research, there is a higher chance that they can improve themselves and become more productive than those faculty who can devote less time in research. In addition, Bullu, *et al.* (2020) in their study revealed that those with heavy family responsibilities like the married faculty tend to sacrifice their research activity to prioritize their family responsibility.

Faculty position have an impact on research productivity. In this research, faculty handling higher academic ranks has higher research productivity and encounter less problems and challenges. This may be attributed to their experiences, networks, skills and ability to generate fundings for their research (Valdavieso, *et al.*, 2022; Eckhaus & Dadvidovitch, 2020; Heng, *et al.*, 2020). This finding is also relevant in terms of educational attainment. This study

found out that the faculty's educational attainment has an impact on research productivity. It was found out in this research that faculty with higher academic achievement has higher research productivity and encountering less problems and challenges. This may be attributed to their experiences receiving formal training from the universities where they enrolled during their master or doctorate degrees. (Valdavieso, *et al.*, 2022; Manila, *et al.*, 2022; Eckhaus & Dadvidovitch, 2020; Heng, *et al.*, 2020).

Conclusion

The study was conducted to assess the challenges being faced by faculty researchers of Isabela State University-Echague campus. It was revealed in the study that faculty are facing several challenges in doing their research. This includes difficulties in writing research paper itself, the proper selection of literatures and statistical tools. In addition to this, they are also experiencing difficulties on administrative related activities such as the long process of approval of the research proposal, delay in the issuance of designations and the tedious and laborious process of disbursing approved research fund. Moreover, statistical analysis showed that female faculty, married and those with lower academic rank and lower academic achievement have more difficulties in doing research than their counterparts.

The findings of the study are valuable to strategically develop a policy and program that may aid the faculty in improving their research capability. The university, through its research and development unit, may device policies that will require mentoring between senior and junior researchers, the conduct of annual trainings in research writing, research techniques and practices. Furthermore, the findings of the study support the need for the continuance of financial incentives and scholarships for faculty who enroll in post-baccalaureate and post graduate studies to further enhance their research capabilities.

Recommendation

The university is encouraged to device an internal mechanism to help the faculty in improving their research capability. The mechanism may include policy on mentoring, annual trainings and seminars on research writing, research techniques and practices. Also, to ensure the continuances of this activities, the university through its Research and Development Unit may look into possibility of developing this into university policy and be incorporated in the existing Manual of Operations for research and development.

The university is encouraged to continue and/or to provide additional budget which will be used for sending faculty in research trainings and scholarship for higher and advanced education.

The University Campus Research Office may facilitate the issuance of designation of faculty and may help in the disbursement of budget allocated for the research. To fast track the

process of evaluation and approval of research proposals, it is recommended for the creation of research evaluators from the pool of expert researchers of the university.

Faculty are encouraged to participate in different research capability building activities, enroll in advance education and other similar activities that may help them enhance their research capability.

Senior research faculty may provide mentoring especially among junior faculty in the field of research.

Other researches may be conducted with focus on research competence, motivation, attitude and other factors that affects research the productivity of the faculty.

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