

Enhancing Research Competency and Publication of the Faculty of College of Nursing, MSU-Sulu: A Descriptive-Correlational Study

Nursidar P. Mukattil¹, Analyn J. Jilah¹, Jara Nieca A. Abdurasul¹, Almalyn A. Najar¹, Marwida S. Abdulhan¹, Maryam A. Saradi¹, Hamdoni K. Pangandaman²

¹Mindanao State University-Sulu, Jolo, 7400, Philippines

²Mindanao State University-Marawi, 9700, Philippines

Abstract

Background: Research has been the basis of the efficiency, effectiveness, and commitment to innovation and development among higher education institutions and universities globally. This study aimed at reporting the research competency installed with the attendees as part of the evaluation and future basis for planning. Also, to predict their perspective on possible attendance in a future research workshop **Method:** Descriptive-predictive research design has been employed to faculty members (n=33) of the College of Nursing of MSU Sulu who attended the 4-days research seminar-workshop. A researchers made formative evaluation assessment tool with 28-statement items that deemed valid and reliable had assessed the faculty competencies and skills in research writing and publication. **Results:** Majority of the faculty as participants were female, undergraduate and masters degree holder, and young breed faculty workforce. The participants' feedback on the research seminar-workshop reflects a positive overall experience and satisfaction with the content and delivery. The participants valued the sessions on quantitative research methods, including different research designs and ethical considerations. **Conclusions:** The findings from this study contribute to professional development, highlighting areas of interest and satisfaction among participants in research-focused events and the institution's commitment to improving the faculty's research output. The insights gained can inform future seminars and workshops to meet nursing professionals' needs regarding research knowledge and skills. Further research can explore the long-term impact of such events on participants' research productivity and the translation of research findings into clinical practice.

Keywords: Enhancement, Nurse Educators, Research, Publication,

1. Introduction

Research has been the basis of the efficiency, effectiveness, and commitment to innovation and development among higher education institutions and universities globally [1]. Schools globally that have made significant contributions through research, as reflected in their number of publications, have earned their placement in the global ranking [2]. The most popular method for evaluating universities worldwide is now the QS World University Rankings [3]. Institutions that have earned the top spot in the ranking are known to be influential worldwide and transform the community towards a better life [4]. The role of faculty in an institution is 33.33 percent of research [5]

Among the top 5 universities ranked in Asia based on their research productivity are as follows: Tsinghua University, the National University of Singapore, Nanyang Technological University, Peking University, and the Chinese University of Hong Kong [6]. It has become possible because of their competitive faculty in research that has made breakthroughs in their respective fields. Enhancing programs such as seminars, training, workshops, and engagement in conferences are part of improving their competency in research.

In the Philippines, few known universities and institutions have a spot in the world ranking. There is a need to catch up with the skills and competency-building of Filipino educators [7]. Only 3,198 of the 11,490 scientists and engineers in the Philippines work for the government, translating to 130 scientists and engineers per million people [8]. On this matter, Mindanao State University, as a system, has been committed to improving research output by creating research capability-building engagements. Its motto, "MSU as one", indicates that all of the branches of MSU must be involved in research. With this, the College of Nursing of MSU Sulu has responded to the need and has organized a research seminar workshop among its faculty to enhance and equip competency in publishing research output to a Scopus-indexed journal.

With this, this study aimed at reporting the research competency installed with the attendees as part of the evaluation and future basis for planning. Also, to predict their perspective on possible attendance in a future research workshop

2. **Methods**

Design:

Descriptive-predictive research design has been employed in this study. Descriptively, this study has aimed at exploring and describing the competency acquired for writing and publishing research output for a Scopus indexed journal. Predictively as it aimed at determining the significant influence of their competency acquired for writing and publishing research output towards their attendance in a possible future workshop. Based on a source, descriptive research design is one that seeks to methodically gather data in order to describe a phenomena, circumstance, or population. More particular, it assists in addressing the what, when, where, and how rather than the why of the research problem[9]. Moreover, predictive research design accordingly focuses primarily on foreseeing (predicting) outcomes, repercussions, costs, or effects. Attempts are made in this kind of research to forecast something that has never been tried, tested, or proposed by extrapolating from the investigation of current events, laws, or other entities[10].

Locale:

This study has been conducted at the College of Nursing of Mindanao State University, Sulu Province. MSU Sulu is a university located at the forefront of Jolo where it caters students in the island densely populated by Tausug [11]. The College of Nursing (CON) offers Bachelor of Science in Nursing since 2009 and have a qualified 32 faculty workforce who are all professional registered nurses. Institutionalization of research in the locale is challenging because of its geographical location and historical social struggles [12].

Respondents and Sample:

All of the faculty members (total remuneration) of the College of Nursing of MSU Sulu has been considered as respondents of the study. They were faculty members who attended the 4-days lecture-seminar-

workshop in research at the function hall of CON. They have been considered as qualified respondents since they have all participated in complete attendance during the event.

Instrument or tool:

The questionnaire in this study is of two-parts. The first part is all about formative evaluation as an assessment of how the faculty of CON has equipped with competencies and skills in research writing and publication based on the 4-days research lecture-seminar-workshop. It is made of 30 declarative statement items measured through 4-point Likert scale as follows: 1=strongly disagree, 2= disagree, 3=agree, and 4=strongly agree. Moreover, the second part is simply an assessment on their perception (of faculty) if they would possibly attend a future research writing workshop validated through as yes (1) or no (0) response. The questionnaire in in this study was evaluated by the executive committee members of the faculty of CON which they deemed to be valid and reliable ($n=30$; $\alpha=0.93$).

Data gathering:

The data was gathered in the last day (4th day) through distribution of hardcopy questionnaire to the participants of the 4-days research lecture-seminar-workshop. Thereafter, data were coded, analyzed, and interpreted.

Data analysis:

The data gathered through formative evaluation as an assessment of competencies and skills in research writing and publication has been analyzed through mean and standard deviation. Then, the perception of faculty in possible attendance in the future research engagement has been analyzed through frequency and percentage distribution. Data has been processed and analyzed using SPSS version 21 software which yielded result.

Ethical consideration:

This research has no particular infringement nor instituted any harm to the participants of the study. The Research Ethics Committee of the CON has evaluated the research and the instrument which adjudged to have no ethical issues.

3. Result

The data at table 1 includes information about the participants' gender, educational attainment, and length of service. Regarding gender, the majority of participants were female (97%) than males (3%). In terms of educational attainment, the largest group of participants consisted of a holder of undergraduate in Bachelor of Science in Nursing (48%). Following closely were participants with a Master's degree (45%) and those who held a Doctorate degree few (6%). When examining the length of service, the majority of participants (61%) had a service duration of 1 to 5 years, and some are in the service for 6 to 10 years (21%). Then those who are in service for 10 years or more were the minority (18%).

Table 1. Profile of CON Faculty (n=33)

Profile	Freq.	% Dist.
Gender		
Male	1	0.03
Female	32	0.97
Educational Attainment		
Undergraduate (BSN)	16	0.48
Master's Degree	15	0.45
Doctorate Degree	2	0.06
Length of Service		
1 to 5 years	20	0.61
6 to 10 years	7	0.21
10 years and more	6	0.18

The data provided at table 2 indicates that the participants highly valued the content and delivery of the seminar and workshop on research. The mean values, ranging from 3.30 to 3.78, reflect a strong agreement with the statements, suggesting a positive overall experience. Participants found the introduction to quantitative research methods clear and informative (mean= 3.70, SD= 0.465) and understood the importance of quantitative research in various fields after the session (mean= 3.63, SD= 0.565). The exploration of different types of quantitative research designs was considered comprehensive (mean= 3.50, SD= 0.510), and ethical considerations in quantitative research were effectively addressed (mean= 3.54, SD= 0.508). The positive responses also extend to other aspects, such as data collection methods, sampling techniques, data analysis techniques, and hands-on exercises, which were deemed helpful and reinforced participants' learning (mean= 3.50 to 3.70, SD= 0.465 to 0.509).

Additionally, participants expressed satisfaction with the workshop's focus on publishing and manuscript preparation. The overview of the publishing process and publication ethics was considered informative (mean= 3.59, SD= 0.501), and the tips for manuscript preparation, including structuring, formatting, and writing style, were valuable (mean= 3.74, SD= 0.447). The session on writing effective abstracts and introductions, aided by tools like Quilbot and Grammarly, improved participants' writing skills (mean= 3.78, SD= 0.424). Moreover, the workshop successfully covered systematic reviews, including their significance, steps involved in conducting them, and guidance on research questions, search strategies, and data analysis (mean= 3.30 to 3.41, SD= 0.565 to 0.636). Participants appreciated the hands-on exercises using specialized software for systematic reviews (mean= 3.63, SD= 0.565) and learned how to convert systematic review output into a publishable format (mean= 3.48, SD= 0.580).

Table 2. CON Faculty competencies and skills in research writing and publication

Statement Items	Mean	SD	Interpretation
1. The introduction to quantitative research methods was clear and informative.	3.70	.465	Strongly Agree
2. I understand the importance of quantitative research in various fields after the introduction.	3.63	.565	Strongly Agree
3. The exploration of different types of quantitative research designs was comprehensive.	3.50	.510	Strongly Agree
4. The lecture effectively addressed ethical considerations in quantitative research.	3.54	.508	Strongly Agree
5. The information on data collection methods in quantitative research was helpful.	3.50	.510	Strongly Agree
6. The lecture adequately covered sampling techniques and sample	3.42	.504	Strongly Agree

size determination.			
7. The lecture provided a thorough explanation of data analysis techniques, including descriptive and inferential statistics.	3.52	.509	Strongly Agree
8. The hands-on exercises and case studies effectively reinforced my learning.	3.70	.465	Strongly Agree
9. The overview of the publishing process and publication ethics was informative.	3.59	.501	Strongly Agree
10. I now understand the importance of publishing in reputable journals after the session.	3.70	.465	Strongly Agree
11. The guidance provided helped me in identifying suitable Scopus indexed journals for research articles.	3.56	.506	Strongly Agree
12. The tips for manuscript preparation, including structuring, formatting, and writing style, were valuable.	3.74	.447	Strongly Agree
13. The session on writing effective abstracts and introductions (with the use of Quilbot and Grammarly) improved my writing skills.	3.78	.424	Strongly Agree
14. I learned how to present research methodology and results in a clear and concise manner.	3.48	.509	Strongly Agree
15. The session on addressing reviewer comments and revising manuscripts provided useful insights.	3.52	.509	Strongly Agree
16. The introduction to systematic reviews and their significance in evidence-based research was clear and informative.	3.41	.636	Strongly Agree
17. I now understand the steps involved in conducting a systematic review after the workshop.	3.37	.565	Strongly Agree
18. The workshop effectively guided me in developing research questions and search strategies for systematic reviews.	3.37	.565	Strongly Agree
19. The workshop provided sufficient guidance on assessing the quality and relevance of studies for inclusion and analyzing data from multiple studies.	3.30	.609	Strongly Agree
20. The workshop adequately covered reporting and presenting systematic review findings.	3.41	.572	Strongly Agree
21. The hands-on exercises using specialized software for systematic reviews were helpful.	3.63	.565	Strongly Agree
22. I learned how to convert output from systematic reviews to AIMRAD publishable format.	3.48	.580	Strongly Agree
23. The feedback and suggestions from the resource person and attendees were valuable.	3.67	.480	Strongly Agree
24. The workshop helped me identify potential journals for submission of AIMRAD output research.	3.67	.480	Strongly Agree
25. Creating an account in the identified/selected Scopus indexed journal was straightforward.	3.62	.496	Strongly Agree
26. I felt confident in uploading and submitting my output for publication in the identified/selected Scopus indexed journal.	3.48	.580	Strongly Agree
27. The overall organization and structure of the seminar and workshop were well-planned.	3.44	.577	Strongly Agree
28. The seminar and workshop met my expectations in terms of content and learning outcomes.	3.63	.565	Strongly Agree

Scale= 1.00-1.75 = Strongly Disagree 1.76-2.50 = Disagree 2.51-3.25 = Agree
3.26-4.00 = Strongly Agree

Table 3 presents the correlation coefficients, statistical tools used, correlation values, and significance levels for the relationships between gender, educational attainment, length of service, and faculty competencies and skills in research writing and publication.

The correlation between gender and faculty competencies and skills in research writing and publication was assessed using Cramer's V, yielding a correlation coefficient of .756 ($p = .525$). The p-value of .525 indicates that this correlation is not statistically significant at the conventional alpha level of .05. Therefore, there is no evidence to support a relationship between gender and faculty competencies and skills in research writing and publication.

Educational attainment was analyzed in relation to faculty competencies and skills in research writing and publication using Spearman's rho. The correlation coefficient obtained was .241 ($p = .042$), indicating a statistically significant relationship between these variables. This result suggests that as educational attainment increases, faculty members' competencies and skills in research writing and publication also tend to improve.

Furthermore, the length of service among faculty members was examined in relation to their competencies and skills in research writing and publication using Pearson's r. The obtained correlation coefficient was .352 ($p = .011$), which demonstrates a statistically significant relationship. This finding suggests that there is a positive association between the length of service and faculty competencies and skills in research writing and publication. As the length of service increases, it is likely that faculty members' competencies and skills in research writing and publication also improve.

Table 3. Correlation, Profile and Competencies and Skills in Research Writing and Publication

Correlated Variables		Statistical Tools	Corr. Value	Sig. (p-value)	Interpretation
Gender	Faculty competencies and skills in research writing and publication	Cramer's V	.756	.525	Not Significant
Educational Attainment		Spearman rho	.241	.042	Significant
Length of Service		Pearson r	.352	.011	Significant

4. Discussion

The data provided reveals exciting insights into the composition of the participants and their perception of the seminar and workshop on research. Primarily, the gender distribution shows a significant majority of female participants (97%) compared to males (3%). This finding aligns with the existing literature indicating a higher representation of females in nursing and healthcare-related fields[13, 14]. It is important to consider gender representation in research studies to ensure diverse perspectives and address potential gender biases. The educational attainment of the participants whom represented by undergraduate degree holder corresponds to the foundational level of education for nursing professionals, suggesting that the seminar and workshop were beneficial for individuals in the early stages of their nursing careers[15, 16]. The high percentage of participants with a master's and doctorate degree further reflects the relevance of the research-focused event for individuals pursuing advanced nursing education. It implies a need for support and encouragement to faculty member to pursue a graduate degree program to improve skills and competence in research. Moreso, the novice and advance beginner faculty of the institution indicate a mix of early-career and mid-career professionals. This diverse range of experience levels provides opportunities for knowledge exchange and professional development within the seminar and workshop setting[17, 18]. The smaller percentages of participants with 6 to 10 years of service and 10 years or more may be attributed to factors such as career advancement, specialization, or personal interest in research.

Turning to the participants' feedback on the seminar and workshop, the mean values demonstrate a positive overall experience and satisfaction with the content and delivery. Participants highly valued the introduction to quantitative research methods, emphasizing the clarity and informativeness of the session. This

aligns with the importance of providing clear guidance and foundational knowledge in quantitative research to enhance participants' research skills and understanding [19, 20]. Moreover, the comprehensive exploration of different quantitative research designs and the effective addressal of ethical considerations further contributed to participants' positive perception of the event. These aspects are essential for researchers to conduct rigorous and ethically sound studies [21, 22]. The positive responses regarding data collection methods, sampling techniques, and data analysis techniques indicate that the seminar and workshop successfully covered fundamental aspects of quantitative research.

Participants also expressed satisfaction with the workshop's focus on publishing and manuscript preparation. The informative overview of the publishing process and publication ethics aligns with the importance of understanding the scholarly publishing landscape and ethical guidelines [23, 24]. The valuable tips for manuscript preparation, including structuring, formatting, and writing style, are crucial for researchers aiming to effectively communicate their findings [25, 26]. The positive response to the session on writing effective abstracts and introductions, aided by tools like Quilbot and Grammarly, and Turnitin highlights the potential value of technology in enhancing participants' writing skills [27].

The coverage of systematic reviews in the workshop and the positive feedback from participants indicate the significance of evidence-based practice in nursing research. Participants appreciated the guidance provided on research questions, search strategies, and data analysis, which are essential components of conducting rigorous systematic reviews [28]. The hands-on exercises using specialized software for systematic reviews facilitated participants' practical learning, aligning with the importance of incorporating active learning methods in research workshops [29]. The ability to convert systematic review output into a publishable format further supports participants' skills development in disseminating research findings effectively [28].

The study on the seminar and workshop on research conducted at the College of Nursing, Mindanao State University Sulu, holds significant importance for the faculty members of the institution. The findings provide valuable insights into the participants' perception of the event, shedding light on several key aspects. The participants' feedback can inform future research initiatives, curriculum development, and support mechanisms for faculty members, ultimately enhancing research capabilities and fostering a culture of scholarly inquiry within the institution. The knowledge and skills they earned in the event must be continuously supported by the top management to sustain upliftment of the number of publications among faculty to reputable journals indexed in Scopus or web of science.

As part of the weakness of this study was it focuses on participants' immediate perception and feedback on the seminar and workshop. However, it does not provide information on the long-term impact of the event on participants' research productivity or the application of the knowledge and skills gained in their future research endeavors. Assessing the sustained effects of the seminar and workshop over time would provide a more comprehensive understanding of its effectiveness.

5. Conclusion

The participants' feedback on the research seminar-workshop reflects a positive overall experience and satisfaction with the content and delivery. The participants valued the sessions on quantitative research methods, including different research designs and ethical considerations. It indicates the effectiveness of providing guidance and foundational knowledge in quantitative research to enhance participants' research skills and understanding. The focus on publishing, manuscript preparation, and systematic reviews received positive responses, emphasizing the importance of understanding the scholarly publishing process and conducting evidence-based research.

The findings from this study contribute to professional development, highlighting areas of interest and satisfaction among participants in research-focused events and the institution's commitment to improving the

faculty's research output. The insights gained can inform future seminars and workshops to meet nursing professionals' needs regarding research knowledge and skills. Further research can explore the long-term impact of such events on participants' research productivity and the translation of research findings into clinical practice.

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