



International Journal of Multidisciplinary Research and Growth Evaluation



International Journal of Multidisciplinary Research and Growth Evaluation

ISSN: 2582-7138

Received: 01-05-2021; Accepted: 17-05-2021

www.allmultidisciplinaryjournal.com

Volume 2; Issue 3; May-June 2021; Page No. 385-389

Factors affecting the research productivity of SDO-San Isidro annex teachers

Dr. Krissina F Posadas¹, Mark Ren D Villaflor², MA Jasmin A Reyes³

¹⁻² College of Education, University of Science and Technology, San Isidro Campus, Nueva Ecija, Philippines

³ Department of Education, Barangka Elementary School, San Isidro, Nueva Ecija, Philippines

Corresponding Author: Dr. Krissina F Posadas

Abstract

Research productivity among teachers in all levels has gained recognition for its role in improving school programs, policies, and teaching and learning processes. As such, determining the factors that may affect this is crucial in building a community of teacher-researchers and creating a research culture in school. The objective of this research is to determine the factors that affect the research productivity of both public elementary and secondary school teachers in San Isidro, Nueva Ecija. It used the descriptive-correlation method, utilizing frequency count and percentage, weighted

mean, and correlation formulas to treat the data gathered. The findings indicate that there exists a positive organizational culture and support for research in public schools and that the teachers are confident in their research abilities. However, results showed that teachers have low research productivity as evidenced by their research publication and presentation outputs. Correlation analysis also revealed that research productivity is highly correlated to research competence and organizational culture/support for research.

Keywords: Research productivity, research competency, organizational culture/support

Introduction

The increasing demand for innovation and improvement in education policies, programs, and teaching strategies requires the conduct of educational research. With the Department of Education being a large institution, there is a need for teachers to engage in research endeavors in order for them to identify their needs and problems for the development or strengthening of contextualized implementation of programs, and policies (Hernando-Malipot, 2020) [7].

With research regarded as a universal tool in and for the improvement of education (Cardona, 2020) [2], research productivity among educational institutions and teachers has become increasingly important. The Department of Education advocates the building and strengthening of the research culture by motivating teachers to conduct research as they are directly involved in classroom situations. This gives them the opportunity to face and experience classroom problem, which can be subjects for action research leading to a discovery of a potential research-based solution to the problem for the improvement of both teaching and learning (Igwe, 2015; Gonzales, Corpuz, and Dellosa, 2020) [9, 6].

The Department of Education has instituted several directives to encourage and support teacher-researchers in the country, among which are DepEd Order (DO) No. 43, s. 2015 that provides the guidelines for the Basic Education Research Fund, and DepEd Order No. 16, s. 2017 that “establishes the Research Management Guidelines (RMG) to provide guidance in managing research initiatives in the national, regional, schools division, and school levels” as well as “improve support mechanisms for research such as funding, partnerships, and capacity building.” Also, DepEd Order No. 39, s. 2016 was issued to “provides guidance in the conduct of basic education research to ensure its alignment with DepEd’s vision, mission, and goals, maximize existing resources, and set up platforms for the sharing and use of results.”

However, despite the increase recognition of the importance of research in education, teachers still encounter challenges that may hamper their research productivity. Bay Jr. and Clerigo (2013) [1], in their study, considered two factors affecting the teachers’ productivity as intrinsic and extrinsic factors, which includes research skills competence as well as tenure and promotion requirements; and organizational support, which includes financial and technical support, and formalized reports of progress and mentorship feedback. Similarly, in a study conducted by Ulla, Barrera, and Acompañado (2017) [11], they found out that a number of teachers in both elementary and secondary schools were uninterested and demotivated to conduct research due to their lack of research knowledge and skills, heavy teaching loads, and lack of financial support from the school.

Being catalysts of education, teachers witness and experience the problems in the classroom firsthand, which could be subject of research for the improvement of school programs and policies, and teaching and learning processes.

According to Ulla, Barrera, and Acompanado, research productivity is seen as an important aspect of the teachers' performance evaluation score, and professional and career development. As such, it is important to determine the challenges that teachers encounter in conducting a research for school administrators to help improve the teachers' research productivity. However, while several researches have been conducted with respect to teachers' research productivity in the country, they mostly focus on college or university faculty members. There is still limited researches of the same conducted in the elementary and secondary level. It is in this context that this study was conducted. It focused on determining the research productivity of both elementary and secondary teachers in terms of the number of researches published in refereed journals and the factors that influence their research productivity. This further aimed to provide data which school administrators and policy makers may use in creating a healthy research culture among public elementary and secondary teacher-researchers.

Statement of the Problem

This study aimed to determine the factors that affect the research productivity of SDO-San Isidro Annex teachers. Specifically, it sought to answer the following questions:

1. How may the respondents' characteristics be described in terms of:
 - 1.1 Age;
 - 1.2 Sex;
 - 1.3 Highest educational attainment;
 - 1.4 Number of years in service;
 - 1.5 Daily teaching hours;
 - 1.6 Number of coordinator ship; and
 - 1.7 Academic rank/teaching position?
2. How may the respondents' research productivity be described in terms of:
 - 2.1 Publication in refereed journal; and
 - 2.2 Presentation in research conferences?
3. How may the factors affecting the research productivity of the respondents be described in terms of:
 - 3.1 research competency
 - 3.2 organizational culture/support?
4. Is there significant relationship between the respondents' characteristics and their research productivity?
5. Is there significant relationship between the respondents' characteristics and the factors affecting the research productivity?
6. Is there significant relationship between the respondents' research productivity and their perceived factors affecting their research productivity?

Null Hypotheses

1. There is no significant relationship between the respondents' characteristics and their research productivity.
2. There is no significant relationship between the respondents' characteristics and the factors affecting the research productivity.
3. There is no significant relationship between the respondents' research productivity and their perceived factors affecting their research productivity.

Materials and Methods

Research Design

This research utilized the descriptive-correlation design to determine the factors affecting the research productivity of SDO-San Isidro Annex Teachers.

Respondents of the Study

This study involved 290 public elementary and secondary teachers in San Isidro, Nueva Ecija.

Instrumentation

The questionnaire used in this study was developed based on the statement of the problem and drawn after a review of literatures related to the study. The instrument is a three-part questionnaire – a characteristics part, a research productivity part, and a self-rating scale. The instrument's face and content validity were evaluated by experts. It was pilot tested to elementary and secondary teachers who were not respondents to this study. Changes recommended by the validation panel, when appropriate, and those identified as needed during the pilot test were incorporated into the instrument.

Procedure

After a series of evaluation, pilot-testing and validation of the instrument, the researchers distributed them to the respondents by sending the link to the google form via the FB messenger app. This is to gather data faster, observing health and safety protocols.

Statistical Treatment

Frequency count and percentage were used in determining the characteristic variables and research productivity of the respondents, while weighted mean was used to describe the factors affecting the respondents' research productivity. Correlation formulas were used in determining the correlation of the respondents' characteristic variables with their research productivity and its affecting factors, as well as between the respondents research productivity and their perceived factors affecting their research productivity.

Results

This section presents the analysis and interpretation of the data gathered from the participants of the study.

1. Characteristics of the Respondents

Results showed that of the 290 of the SDO-San Isidro annex teacher-respondents of the study, 107 or 36.9 % were within the age bracket of 40 to 49 years old, and were mostly females (245 or 84.5%). Majority of the respondents have earned Master's units (200 or 69%) and have been in the service for 1-10 years (117 or 40.3%). Also, 162 or 55.9 % of the respondents engage in 8 hours of daily teaching, while 222 or 76.6 % of them had 1-3 designated coordinatorship. In terms of their academic rank or teaching position, 140 or 48.3% of them were ranked as Teacher 3.

2. Respondents' Research Productivity

2.1 Publication in Refereed Journals

Table 1 presents the respondents' research productivity in terms of the number of researches they published on refereed local, national, or international journal.

Table 1: Number of research/es published on refereed journal (local, national, or international)

Published Research/es	No. of Respondents	Percentage
0	274	94.5%
1	11	3.8%
2	4	1.4%
3	1	0.3%
More than 3 researches	0	0%
Total	290	100%

2.2 Presentation in research conferences

Table 2: Number of research/es presented on research conferences (local, national, or international)

Research Presentation	No. of Respondents	Percentage
0	271	93.4%
1	12	4.1%
2	4	1.4%
3	2	0.7%
More than 3 researches	0	0%
Total	290	100%

3. Factors affecting the research productivity

3.1 Research Competency

Table 3: Respondents’ Perceived Research Competency

Research Competency: I am confident in...	Mean	Verbal Interpretation
The technical aspect of research writing such as grammar and construction, and research paper format.	3	Agree
Identifying and formulating research problem/s.	2.98	Agree
Determining the purpose and objectives of a study	3.03	Agree
Finding and conceptualizing related literatures.	2.94	Agree
Determining a research/theoretical base of a study	2.94	Agree
Developing the research design.	2.89	Agree
Developing the research instrument.	2.93	Agree
Presenting, interpreting, and analysing the data collected.	2.94	Agree
Synthesizing the results.	2.91	Agree
Formulating recommendations to address the problems and concerns found in the study.	2.93	Agree
Writing a clear and concise research abstract.	2.9	Agree
Presenting and formatting the references in APA format.	2.89	Agree
Grand Mean	2.94	Agree

Legend: 3.50 – 4.00 = Strongly Agree, 2.50 – 3.49 = Agree, 1.50 – 2.49 = Disagree, 1.00 – 1.49 = Strongly Disagree

3.2 Organizational Culture/Support

Table 4: Respondents’ Perceived Organizational Culture/Support

Organizational Culture/Support: My school/organization...	Mean	Verbal Interpretation
Provides enough financial support for conducting.	2.84	Agree
Offers competitive pay/honorarium/incentives in conducting research.	2.8	Agree
Provides reliable internet access and access to online journals for conducting a research.	2.87	Agree
Recognizes individuals who engage in research endeavours.	3.02	Agree
Encourages its teachers to conduct research.	3.1	Agree
Offers a reduction in teaching load for publishing a research in refereed journals.	2.85	Agree
Encourages collaboration among teacher-researchers.	3.04	Agree
Supports teachers' efforts to publish in refereed research journals.	3.04	Agree
Provides sufficient in-house and outside trainings to enhance teachers' research competencies.	2.97	Agree
Offers technical support such as statistician, grammarian/English critic, and research adviser for teacher-researchers.	2.91	Agree
Grand Mean	2.94	Agree

Legend: 3.50 – 4.00 = Strongly Agree, 2.50 – 3.49 = Agree, 1.50 – 2.49 = Disagree, 1.00 – 1.49 = Strongly Disagree

Table 5: Summary of the Respondents’ Perceived Factors Affecting their Research Productivity

Factors	Weighted Mean	Verbal Interpretation
Research Competency	2.94	Agree
Organizational Culture/Support	2.94	Agree
Grand Weighted Mean	2.94	Agree

Legend: 3.50 – 4.00 = Strongly Agree, 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 – 1.49 = Strongly Disagree

4. Relationship between the Respondents’ Characteristics and Their Research Productivity

Table 6 shows the correlation analysis of the respondents’ characteristic variables and their research productivity.

Table 6: Correlation Analysis of the Respondents’ Characteristics and their Research Productivity

Respondents’ Characteristics	Research Productivity	Decision	Interpretation
Age	0.971**	Reject Ho	Significant
Sex	0.544**	Reject Ho	Significant
Highest Educational Attainment	0.632**	Reject Ho	Significant
Number of Years in Service	0.822**	Reject Ho	Significant
Daily Teaching Hours	0.664**	Reject Ho	Significant
Number of Coordinatorship	0.721**	Reject Ho	Significant
Teaching Position	0.925**	Reject Ho	Significant
*p<0.05, **p<0.01			

5. Relationship between the Respondents’ characteristics and the factors affecting their research productivity

Table 7 shows the correlation analysis of the respondents’ characteristic variables and the factors affecting their research productivity.

Table 7: Correlation Analysis of Respondents’ Characteristics and the Factors Affecting their Research Productivity

Respondents’ Profile	Factors	Decision	Interpretation
Age	-0.009	Accept Ho	Not Significant
Sex	0.050	Accept Ho	Not Significant
Highest Educational Attainment	-0.034	Accept Ho	Not Significant
Number of Years in Service	-0.022	Accept Ho	Not Significant
Daily Teaching Hours	0.029	Accept Ho	Not Significant
Number of Coordinatorship	0.013	Accept Ho	Not Significant
Teaching Position	-0.007	Accept Ho	Not Significant
*p<0.05, **p<0.01			

6. Relationship between the Respondents’ Research Productivity and the Factors Affecting their Research Productivity

Table 8: Correlation Analysis of Respondents’ Research Productivity and the Factors Affecting their Research Productivity

	Factors	Decision	Interpretation
Research Productivity	0.568	Reject Ho	Significant
*p<0.05, **p<0.01			

Discussion

Literatures have made clear the importance for teachers to engage in research endeavors, particularly in action research. Hine (2013) [8] has noted that doing action research could lead to both the betterment of the teachers’ teaching skills and their students’ progress and improvement. However, the findings of the study showed that public school teachers in San Isidro, Nueva Ecija had very low research productivity as majority of them have not presented nor have published a single research yet. This implies that they were either disinterested or unmotivated to conduct research.

The results also showed that the teachers agreed on organizational support and their competency to be affecting factors in their research productivity. This means that they are confident in their abilities and competence in the technical aspects involved in conducting research, especially in terms of determining the purpose and objectives of a study and in grammar and construction, and research paper format. They also claimed that their school fosters a research culture, especially in terms of encouraging collaboration among teacher-researchers, and supporting teachers’ efforts to publish in refereed research journals. These findings are

similar to those of Bay Jr., *et. al.* (2013) [1]. However, despite their confidence in their research competence and the existing organizational culture or support for research provided by the school, only a few of the teachers actually engaged in research, which concurs with the findings of Ulla, *et. al.* (2017) [11].

Moreover, it was found out that the teachers’ research productivity had a positive correlation to their profile characteristics. This implies that a teacher’s age, sex, highest educational attainment, number of years in service, daily teaching hours, number of coordinatorship, and academic rank/teaching position. Nasser-Abu Alhija and Majdob (2017) [10] claimed that sex, age, academic degree, teaching experience, rank, among others, influences a teacher’s research productivity; while Ulla, *et. al.* (2017) [11] noted teaching load as an influence to research productivity. These support the findings of the present study as results indicate that the respondents’ profile variables have a direct effect on his or her research productivity. Therefore, the null hypothesis is rejected.

On the other hand, there was no evidence of the respondents’ profile characteristics having a correlation with the teachers’ perceived factors affecting their research productivity. This implies that the teacher’s confidence in his or her research competency and the organizational culture/support for research have no direct relationship with their characteristics. Therefore, the null hypothesis is accepted.

Correlation analysis also revealed that there is a high significant relationship between the respondents’ research productivity and their perceived research competency and organizational culture/support for research. This implies that teachers who have competence in different aspects of research and receive support and encouragement from the school would likely have high research productivity. Therefore, the hypothesis is rejected. This is congruent to the findings of Bay Jr., *et. al.* (2013) [1] and of Wong (2019) [12]. In a study conducted by Bay Jr., *et. al.* (2013) [1], they found that research productivity is affected by the teachers’ confidence in their research capabilities, while Wong’s (2019) [12] findings highlighted the need to strengthen institutional support to improve the teachers’ research productivity.

Conclusions and Recommendations

The respondents have confidence in their research competence and thus have no major concern about conducting research. Organizational support and research culture also exist in public schools. However, their research productivity is still very low as they seemed to elect not to undertake research. Also, teachers’ characteristics showed a

significant relationship on their research productivity. Furthermore, research productivity showed a very high correlation with factors as their research competency and the organizational culture/support. Hence, organizational support to research activities and their confidence in their research capability, particularly in the technical and major parts were all indicators linked with their research productivity. Therefore, the Department of Education may also intensify the mentoring and training of teacher-researchers to help them produce quality research and develop a functional teachers' development plan for advanced education to broaden their knowledge and research skills (Gonzales, *et.al.*, 2020) ^[6]. Also, school heads or administrators may extend more motivation or support in faculty research, and diversify the opportunities they provide for all their teachers, regardless of their characteristics in order for better motivate all faculty members to engage in research activities and therefore, improve their research productivity in the form of publication in refereed journals and presentation in research conferences.

Acknowledgements

The researchers would like to express their deepest thanks to the following key persons for allowing and helping them conduct this study:

- Dr. Jessie D. Ferrer, CESO V – Schools Division Superintendent of DepEd Nueva Ecija;
- Dr. Severino M. Jocson, Jr. -Public Schools District Supervisors of SDO-San Isidro Annex;
- Elementary and Secondary School Principals of San Isidro; and
- Elementary and Secondary Teachers of the public schools in San Isidro.

Above all, to God almighty for the gift of life and wisdom. For without His divine guidance, this research work will not be possible.

References

1. Bay Jr, BE, Clerigo MEC. Factors Associated with Research Productivity among Oral Healthcare Educators in an Asian University. *International Education Studies*. 2013; 6:8. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1068639.pdf>
2. Cardona RS. The Enablers and Outcomes of Research Productivity among Junior High School Mathematics Teachers: A Structural Model. *EURASIA Journal of Mathematics, Science and Technology Education*. 2020; 16:11. Retrieved from <https://bit.ly/39PYpI1>
3. Dep Ed No 43. S. 2015. Adoption of the Basic Education Research Agenda. Retrieved from <https://bit.ly/3xesKtM>
4. Dep Ed Order No. 39, s. 2016. Adoption of the Basic Education Research Agenda. Retrieved from https://www.deped.gov.ph/wp-content/uploads/2016/06/DO_s2016_039.pdf
5. DepEd Order 16, s. 2017. Research Management Guidelines (RMG). Retrieved from <https://bit.ly/3efHgZm>.
6. Gonzales IB, Corpuz DA, Dellosa RM. Research Capabilities of Public Elementary School Teachers and Management Support of The Schools Division of Nueva Vizcaya, Philippines. *Humanities & Social Sciences Reviews*. 2020; 8(4):258-266. Retrieved from <https://doi.org/10.18510/hssr.2020.8427>

7. Hernando-Malipot M. DepEd strengthens culture of research to help improve quality of education. *Manila Bulletin*, 2020. Retrieved from <https://bit.ly/3wBJMBO>
8. Hine GSC. The importance of action research in teacher education programs. *Issues in Educational Research*, 2013, 23(2): Special Issue. Retrieved from <http://www.iier.org.au/iier23/hine.pdf>
9. Igwe LE. *Instructional to Educational Administration*. Port Harcourt. Global Link Communication International, 2015.
10. Nasser-Abu Alhija FM, Majdob A. Predictors of Teacher Educators' Research Productivity. *Australian Journal of Teacher Education*, 2017, 42(11). Retrieved from <https://bit.ly/32Fdloh>
11. Ulla MB, Barrera KB, Acompañado MM. Philippine Classroom Teachers as Researchers: Teachers' Perceptions, Motivations, and Challenges. *Australian Journal of Teacher Education*, 2017, 42(11). Retrieved from <http://ro.ecu.edu.au/ajte/vol42/iss11/4>
12. Wong M. Driving Forces of Master Teachers' Research Capability: Towards Building A Research Culture in The Division of Romblon, Philippines. *International Journal of Advanced Research and Publications*. 2019; 3(7). <http://www.ijarp.org/published-research-papers/july2019>.