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Elementary School Teachers' Attitude Towards Research as Basis for a Proposed Enhancement Plan

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Abstract

Having a positive attitude towards research provides meaningful experience in conducting and writing research paper but having a high level of anxiety towards it at the same time hinders the productivity of the teachers to start and complete at least one research paper at the end of the school year. With this, the study aimed to assess the attitude of teachers from one elementary school in Naga City, Camarines Sur, Philippines in terms research usefulness, anxiety, and positive research predispositions. Quantitative descriptive type of research method was utilized in the study with total populations of 62 teachers as respondents. The findings showed that teachers have very high level of positive attitude towards the usefulness of research and high level of positive research predisposition. However, they also showed high level of anxiety towards research. Furthermore, bachelor's degree holders have significantly lower attitude towards the usefulness of research compared to those with higher degrees. Findings of the study suggest an enhancement plan to realize the usefulness of research in their professional growth and extend its utilization to their students, institution and other communities.

Keywords: Elementary School; Extension Program; Needs Assessment; Research Skill

Introduction

Research writing has been considered as one of the challenges among primary school teachers in the Philippines because it is not really part of their responsibility nor obligation compared to tertiary school teachers. They are somehow detached to the research culture (Adegnika et al., 2021; Bukamal, 2022) and their attitude towards it may also be affected (Van Katwijk et al., 2021; Tergouw, 2022). Majority of them are not even required to pursue master's degree. Only those who wanted to be promoted in higher position or academic rank are motivated to enroll in graduate studies (Ramirez et al., 2020; Manila et al., 2022) where extensive research training is being practiced. Since, research is not part of



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their habit as primary school teacher, they find it difficult to produce a research paper at the end of the school year.

Having a positive attitude towards research is a mindset that influences the actions to move the person towards attaining the goal no matter how difficult the assigned task. Majority of the surveys confirmed that conducting as well as writing research paper is difficult (Rusero, 2022; Malyukova, 2021; O'Brien & Dingle, 2022), especially from the perspective of those who never had an experience doing it even once. But for primary school teachers in the Philippines, research already becomes part of the requirements for promotion (Khurshid, 2013; Hawkins, 2016) which may somehow provide them motivation to complete a research paper and later present it in the national or international conferences. Having published their outputs and seeing their names printed in the national and international journals may provide them a higher satisfaction when they realize the importance of research in their professional career as teachers.

This study aims to determine the attitude of teachers towards research in terms of research usefulness, anxiety and positive research predispositions. It also tested the differences on attitude towards research when the respondents are grouped according to sex and educational attainment. These profile variables were selected to describe the attitude of teachers that may somehow affect their perspective on the utility value of research in general. People are motivated and interested to pursue a specific activity or make a decision based on the benefits that will bring to them at the end of the task (Schaller, 2016; Sobotker, 2021). They consider the connection of research to their field of work and its usefulness to their career (Valdovinos Rodriguez, 2016). However, there are teachers who do not see the benefit of research in their future undertakings. They tend to look at research on the perspective of career development (Galustyan et al., 2017; Raduan & Na, 2020) which is more on personal gain rather than towards community development.

Several studies revealed that research writing is stressful (Filali et al., 2022; Issah & Braimah, 2020; Muthuswamy et al., 2017; Tindowen et al., 2019) which scares them when they hear the word research which makes them anxious and nervous as well. This feeling of anxiety makes the research task more difficult to them (Khan et al., 2018; Abinan, 2021). Thus, several training and development activities are being conducted in the academe to make them feel confident and knowledgeable of the research processes (Ulla et al., 2017; Gonzales et al, 2020). Enhancement programs and plans of action are designed to strengthen their research skills and apply the findings to the intended communities. It is the goal of this plan to develop a mindset among elementary school teachers on how to utilize research as a way to improve their respective institutions and delivery of instruction towards the attainment of the Sustainable Development Goal number 4 on Quality Education. Making research as interesting and pleasant for the teachers will help them minimize its perceived stress and transform this feeling of anxiety into challenging activities to inspire them and boost their moral as professionals.

Methods

Quantitative descriptive type of research method was utilized in the study. Quantitative descriptive research is an activity to gather broad information about an event or state of a variable as it is (Alwan & Darmaji, 2017). This method is deemed appropriate for this study to determine the characteristics of the respondents and their attitude towards research. This study was conducted in the learning community of one elementary school in Naga City, Camarines Sur, Philippines. There are almost 62 elementary school teachers included in the study with prior approval from the School Principal regarding the conduct of the study. Only those teachers who are willing to participate in the study were considered in the survey for ethical consideration. The questionnaire was administered to the teachers



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through google form and sent to the Group Chat of teachers thru Messenger to lessen the personal contact with the respondents to observe the health protocols during COVID-19 Pandemic.

Revised - Attitudes toward Research Scale (R-ATR)

Factor	Number of items	Cronbach's Alpha
Research usefulness	4	0.831
Anxiety*	5	0.854
Positive research predispositions	4	0.892

^{*}Reverse coding

The Revised Attitude towards Research Scale (Papanastasiou, 2014) was tested its reliability to the 30 respondents not included in the study and obtained a Cronbach's alpha value of 0.831 for research usefulness, 0.854 for Anxiety and 0.892 for positive research predispositions which imply that the set of instrument has a good internal consistency.

The questionnaire was administered to the teacher-respondents through online platform using google form. The researchers used the group chat of these teachers using a survey link. The conduct of the survey has an approval from the School Principal. The respondents were also given an informed consent and they are aware of the purpose and objective of this study. Only those teachers who are willing to participate in the study were asked to answer the online link. The target number of respondents is 62 teachers from one elementary school in Naga City, Camarines Sur, Philippines. The study obtained a 100 percent retrieval rating from the responses. This signifies that they are all willing to participate in the study. They are very much cooperative and participative in the research undertakings of the higher education institutions who partnered with them in academic, research and extension activities.

Meanwhile, frequency count, percentage and weighted mean are the descriptive statistics utilized in describing and presenting the gathered data from the survey. The set of data was tested its normality using Shapiro Wilk Test with computed p-value of 0.118 which is greater than 0.05 that signifies that the data set is assumed with normal distribution, therefore, parametric test was used in the study. Independent sample t-test was utilized to test the significant difference on the needs assessment of teachers when grouped according to profile variable with two categories while Analysis of Variance (ANOVA) was utilized for profile variable with three or more categories using 0.05 level of significance. The given scale was used to interpret the result of the survey: 3.50-4.00: Strongly Agree (SA); 2.50-3.49: Fairly Agree (FA); 1.50-2.49: Disagree (DA); 1.00-1.49: Strongly Disagree (SDA).

Results and Discussion

Table 1. Personal and Research Profile of the Teacher-Respondents (N=62)

Profile	Category	Frequency	Percent
Sex	Male	7	11.3
	Female	55	88.7
Educational Attainment	Bachelor	30	48.4
	With Master's Units to	32	51.6
	Doctorate Degree	32	31.0
Level of Research	Not Difficult	2	3.2
Difficulty	Less Difficult	2	3.2
	Moderately Difficult	21	33.9
	Much Difficult	27	43.5
	Very Much Difficult	10	16.1

There are more female (55 or 88.7%) elementary teachers than males (7 or 11.3%). Since, bachelor's degree is the only required educational background to teach in primary schools, there are more bachelor's degree holders (30 or 48.4%) among the respondents than teachers having units earned in Master's (27 or 43.5%) and holders of Master's degree (2 or 3.2%). Only two (2) teachers have units in Doctorate program while only one (1) teacher is a Doctorate degree holder. When they were asked regarding the level of difficulty they experienced or perceived about research, the 27 or 43.5 percent of them answered much difficult, followed by the group who said moderately difficulty (21 or 33.9%) and 10 or 16.1 percent answered very much difficult. Meanwhile, there are two (2) teachers believed that writing research is less difficult, and another two (2) teachers replied not difficult at all.

Table 2. Attitude of Teacher-Respondents Towards Research

Att	itude Towards Research	WM	SD	SDA	DA	FA	SA	
Res	Research Usefulness							
1.	Research is connected to my field of work.	3.55	± 0.56		3.2	38.7	58.1	
2.	Research is useful for my career.	3.61	± 0.58		4.8	29.0	66.1	
3.	Acquired research skills will be helpful to me in the future	3.53	±0.69	1.6	6.5	29.0	62.9	
4.	Research should be indispensable in my professional training	3.19	±0.67	1.6	9.7	56.5	32.3	
An	xiety							
5.	Research writing makes me anxious.	3.02	± 0.74	3.2	16.1	56.5	24.2	
6.	Research scares me.	2.60	± 0.91	9.7	40.3	30.6	19.4	
7.	Research is stressful.	3.18	± 0.71		17.7	46.8	35.5	
8.	Research makes me nervous.	2.97	± 0.77	1.6	25.8	46.8	25.8	
9.	Research is difficult.	3.10	± 0.72	1.6	16.1	53.2	29.0	
Pos	Positive research predispositions							
10.	I enjoy research writing.	2.60	± 0.71	8.1	29.0	58.1	4.8	
11. I love the research process.		2.71	± 0.78	9.7	19.4	61.3	9.7	
12. I find research interesting.		2.94	± 0.72	3.2	19.4	58.1	19.4	
13.	Research is pleasant.	2.87	± 0.61	3.2	16.1	71.0	9.7	

There are more teachers who strongly agreed that research is useful for their careers (WM=3.61, $SD=\pm0.58$) and acquiring research skills will be helpful to them in the future (WM=3.53, $SD=\pm0.69$). They also strongly agreed that research is connected to their field of work (WM=3.55, $SD=\pm0.56$). They have a high level of positive attitude towards research in terms of its usefulness. They believe on what research can contribute to the enhancement of their career in the future, but they find it difficult where to start in research writing.

Meanwhile, they agreed on research should be indispensable in their professional training (WM=3.19, $SD=\pm0.67$). Most of the respondents have agreed with 56.5 percent answered that research writing makes them anxious (WM=3.02, $SD=\pm0.74$) while 46.8 percent of them also agreed and 35.5 percent strongly agreed that research is stressful (WM=3.18, $SD=\pm0.71$). Almost 82.3 percent of the teachers feel pressure and tension when thinking about research. They also think that research is difficult (WM=3.10, $SD=\pm0.72$) according to the 53.2 percent who answered agree and 29 percent who answered strongly agree. They also have higher level of anxiety towards research as indicated by the percentage of their responses.

There are 46.8 percent of the teachers who agreed that research makes them nervous (WM=2.97, SD=±0.77) compared to 25.8 percent who answered strongly agree and another 25.8 percent who disagreed in the statement. Meanwhile, there are more teachers (40.3%) who disagreed and 9.7 percent

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who strongly disagreed that research scares them (WM=2.60, $SD=\pm0.91$) while still half of them are scared about research.

Result showed that there are still 2 to 4 teachers with low positive research predisposition but there are 71 percent of them agreed that research is pleasant (WM=2.87, SD=.61) and 58.1 percent also agreed that they find research interesting (WM=2.94, SD=.72). Likewise, 61.3 percent of them agreed that they love the research process (WM=2.71, SD=.78) and 58.1 percent also agreed that they enjoyed research writing (WM=2.60, SD=.71).

The result of the survey showed that they still have high level of positive research predispositions that need to be supplemented or supported by training and applications that will lead them towards the achievement of relevant professional growth. They will never realize and accomplish this without the assistance of the school administration.

Table 3. Test of Difference in the Attitude towards Research When grouped according to Sex

Attitude Towards Research	Male	Female	t-		
	(N=7)	(N=55)	value	p-value	
Research Usefulness					
1. Research is connected to my field of work.	3.57	3.62	198	.843	
2. Research is useful for my career.	3.43	3.56	594	.555	
3. Acquired research skills will be helpful to me in the future	3.14	3.58	-1.594	.116	
4. Research should be indispensable in my professional training	3.14	3.20	210	.835	
Anxiety					
5. Research writing makes me anxious.	3.00	3.02	061	.951	
6. Research scares me.	2.14	2.65	-1.407	.165	
7. Research is stressful.	3.00	3.20	696	.489	
8. Research makes me nervous.	3.00	2.96	.117	.907	
9. Research is difficult.	3.00	3.11	376	.708	
Positive research predispositions					
10. I enjoy research writing.	2.43	2.62	661	.511	
11. I love the research process.	2.43	2.75	-1.017	.313	
12. I find research interesting.	2.71	2.96	860	.393	
13. Research is pleasant.	2.71	2.89	714	.478	

^{*} Significant at p<.05; **Highly Significant at p<.01 (2-tailed)

Table 3 shows the test of difference in the attitude towards research when teachers are grouped according to sex. The computed p-values are all greater than 0.05 alpha level which signifies that the teachers have varying degrees of attitude towards research regardless of sex. Although there are more females than males, it is good to note that no significant difference exists between both sexes. This result confirmed the previous study of Maravilla (2020) where the attitude towards research of teachers in one state university in the Philippines does not vary significantly across genders. Although in most indicators, if the weighted mean scores between male and female teachers are compared, female teachers have little higher scores than males in research usefulness and having positive research predispositions as well as in anxiety. But the variances are not adequate to consider it as significant. It shows that both sexes experienced difficulty in research writing. Therefore, there is an equality between male and female teachers in their attitude towards research.



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Table 4. Test of Difference in the Attitude towards Research When grouped according to Educational Attainment

Attitude Towards Research	Bachelor	Master/ Doctorate	t-value	p-value
Research Usefulness				
 Research is connected to my field of work. 	3.30	3.78	-3.653**	.001
2. Research is useful for my career.	3.33	3.88	-4.028**	<.01
3. Acquired research skills will be helpful to me in the future	3.17	3.88	-4.534**	<.01
4. Research should be indispensable in my professional training	2.97	3.41	-2.697**	.009
Anxiety				
5. Research writing makes me anxious.	3.03	3.00	.177	.860
6. Research scares me.	2.60	2.59	.027	.979
7. Research is stressful.	3.20	3.16	.239	.812
8. Research makes me nervous.	3.03	2.91	.648	.519
9. Research is difficult.	3.17	3.03	.740	.462
Positive research predispositions				
10. I enjoy research writing.	2.47	2.72	-1.404	.165
11. I love the research process.	2.50	2.91	-2.117*	.038
12. I find research interesting.	2.70	3.16	-2.604*	.012
13. Research is pleasant.	2.63	3.09	-3.107**	.003

^{*} Significant at p < .05; **Highly Significant at p < .01 (2-tailed)

Table 4 presents the test of difference in the attitude towards research when grouped according to educational attainment. The result showed that significant difference exists on the research usefulness. It showed that those teachers with units earned or master's degree holders and those with units and doctorate degree holders have significantly higher positive attitude towards the usefulness of research compared to the responses of teachers who are bachelor's degree holders. Meanwhile, no significant difference exists on the level of anxiety of the teachers towards research as indicated by the computed p-values of greater than 0.05 alpha level. This signifies that the anxiety of teachers towards research are diverse across different levels of educational attainments.

Furthermore, significant difference exists on the positive research predispositions of teachers except for the indicator that they enjoy research writing (t=-1.404, p=.165). Result showed that those teachers who attended advanced studies have significantly higher positive research predispositions on loving the research process (t=-2.117, p=.038), finding research as interesting (t=-2.604, p=.012) and research is pleasant (t=-3.107, p=.003). This result confirmed the previous study of Maravilla (2020) where the attitude towards research of teachers in one state university in the Philippines varies significantly across educational attainment. Another study in the Philippines conducted among academic librarians revealed that the respondents with Doctorate units have significantly positive higher attitude towards research and more confident in research process than those Bachelor's degree holder with significantly higher research anxiety and difficulty (Sison, 2019). But the result of the present study revealed that teacher-respondents have high level of anxiety in research regardless of educational attainment. In addition, a study in Israel among teachers showed that they are likely to have lower degrees and ranks, which presumably results in non-existent or limited research activity due to lacking research skills or self-confidence (Alhija & Majdob, 2017).



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Another study from a higher education in the Philippines revealed that there is no significant difference when the respondents are grouped according to highest education attainment where the respondents with either master's or doctorate degree holders have varying experiences in doing research (Abrugena et al., 2020). However, the study of Guzman et al. (2006) showed that attitude towards research is influenced by the highest educational attainment.

Table 5 presents the proposed enhancement plans which aims to deliver the research services to the teachers by conducting capacity building, coaching and mentoring sessions, building a learning community, and monitoring the outputs of the teachers. This enhancement plan will be spearheaded by a partner institution from Higher education (Partner Institution). This elementary school (Host Institution) will serve as part of the beneficiary of the extension program of one public higher education in the province.

Table 5. Proposed Enhancement Plan

Key Result Area	Objectives	Activities	Person/Agency Responsible
Research Usefulness	To realize the usefulness of research in their professional career	 Conduct research capacity building Advise the teachers to enroll in advance studies Attend national and international research conferences 	Research Coordinator of the Partner institution
Research Anxiety	To lessen the research anxiety of teachers	 Provide coaching and mentoring sessions Build a learning community for research Apply the knowledge gained from trainings attended 	Partner and Host institution
Positive Research Dispositions	To strengthen the positive dispositions of teachers in research	 Monitor consistently the research outputs Do collaborative research for sharing of tasks and resources Create a cooperative learning environment 	Host Institution with supervision of the coordinators from partner institution

Conclusion

The profile of the respondents shows that most of the teachers are dominated by females, bachelor's degree holders with Teacher I position. In addition, there are three (3) in every five (5) teachers experienced much to very much difficulty in research. Teachers have very high level of positive attitude towards the usefulness of research and high level of positive research predisposition with considerable high level of anxiety towards research as well. Teacher-respondents have positive attitude towards research regardless of sex profile while those bachelor's degree holders have significantly lower attitude in research in terms of usefulness of research than those with higher level of educational attainments. The enhancement plan is proposed to realize the usefulness of research to the professional career of teachers while assisting them in conducting research with coaching and mentoring sessions. The findings of this study are limited to only one elementary school in the Philippines and the variable used is

only attitude towards research as part of the needs assessment which is one of the requirements for a training design to be developed in conducting research capacity building.

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