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Original Research Article

## The attitudes of teachers towards scientific research writing in schools of Norbuling CS and Zhemgang CS, Bhutan: A comparative study

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### Abstract

This study resolute the research capabilities and interest among center school teachers of Norbuling and Zhemgang schools of Bhutan. This study employed the descriptive-correlational method. The descriptive method described the characteristics of the respondents, the extent of research capabilities, motivations, and their interest within the field of research. Seventy-seven respondents were drawn from the population. A Stratified sampling method was accustomed to determining samples per stratum. The researchers detected research morals and etiquettes during the collecting process. Descriptive-Inferential statistics were wont to interpret the information. The study revealed that respondents were fascinated by writing research but because of lack of motivation and their capability, they lack within the research process and dissemination. The respondents are abstemiously proficient in their research competencies and research propagation. The number of research capabilities was significantly correlated with motivation and interest. Research support was inadequate; a positive research environment must be provided to encourage them in research writing. The findings of the study provide data of two different schools to grasp the factors affecting the research capabilities of public-school teachers. The college heads can come up with a workable decision to enhance research capabilities and manage their resources, policies, time, space, and personnel for optimum effect. The fast trend in instructional technology and innovative approaches and teaching pedagogies, knowledge, and skills within the research of all academic professionals is important. Conducting research becomes now mandatory within the educational institutions within Bhutan; thus, needs continuous assessment to supply a community of teacher-researchers.

**Keywords** Research capabilities, motivation, interest, Bhutan

### Introduction

Educational research could be a style of systematic investigation that applies empirical methods to solving challenges in education. It adopts rigorous and well-defined scientific processes to assemble and analyze data for problem-solving and knowledge advancement. As that activity that's directed towards the event of educational situations, the last word aim of such a project is to produce knowledge that may permit the educator to realize his goals through the foremost effective methods.

The primary purpose of educational research is to expand the present body of data by providing solutions to different problems in pedagogy while improving teaching and learning practices. Through the conduct of research, the researchers also search for solutions to questions disturbing learner motivation, progress, and classroom managing.

The development of organizational beliefs and research competence of faculty teachers enables the teachers to innovate and find out the answer to novel problems and it overall helps to develop our societal infrastructure. Research competence in education enhances the systematic analysis and describes the statistics scientifically. This helps to develop the professionals, useful for the resolution of the matter from our society. The involvement of the teachers in research can play a big role within the coupling of research as a core activity into teaching. This can create a unique understanding, helpful for the advance of intellectuality. Moreover, research and organizational attitude-based teaching may be ready to solve the long-standing socio-economical problem in our society.

The paradigm of research competence is changing along with the organizational philosophy in complex technology. However, the different schools have to develop and expand the research competence of researcher in internet capabilities.

It has to understand the need for new economic realities and conduct the research to unravel the problems associated to organizational belief and research proficiency with human settings.

It is upon this premise that this present study was initiated to identify the skills and attitudes of teachers towards conducting research. This will also look into internal factors such as research skills and attitudes to understand the difficulty being experienced by the teachers when it comes to conducting research. Thus, a thorough understanding of teachers' attitudes towards research would also provide valuable input as to why only a few teachers conduct researches considering that this is part of their mandate.

### Literature Review

Erero (2000), high impact publication and scholarly productivity became important criteria to reward the performance of educational staff within the universities in taking up the research as a profession.

Wodarski (2001), research competence increases the efficiency of educational staff to try and do more productive research in universities/institutions. At present, the reputation of teachers is declining because of the shortage of research knowledge which ends up being unproductive within the development of educational education. There is indeed a chance for the teachers to become absolute if not equip up with the research methodology.

Plonikova (2007), addressed the importance of integrating research skills into the pre-service teacher education program has a positive effect on teachers. Research competence has more effect on faculty members to extend their research productivity and it's a functional system of the research knowledge, skills, and talent to judge and analyze the scientific material.

Williams and Dyke (2008), the research competence of the educational staff of universities is that the most significant factor to realize the research funding, needful consultancy, and opportunity to recruit the competent students for sustainable output. It's known that the research performance of the colleges is the primary factor that is expounded to determine the ranking.

Ushakov (2008), research competence is that the integral quality of personality, and this mainly reflects the willingness and skill to independently find solutions to novel problems. This is often able to transform knowledge, capabilities, intellectual skills, and socio-economic values. The economic and sustainable development of the country depends on the educational research and implementation of research into productivity through industrialization. Research competence is related to the capacity and willingness to search out meaningful solutions to novel problems through intellectual skills and knowledge.

Pachanawan (2009), the new paradigm of development is achieved through enriching the research competency of teachers through various training processes because it has been mentioned earlier. Sahar and Tarhan (2015), identify that the teachers' attitude towards research and research skills features a negative effect on the angle of teachers in gaining the research project methods course. However, it'll also help to grasp that academic staff is satisfied with this research development strategies or it should be modified or improved within the future.

Bell (2016), examines the hitches countered in designing the research capabilities. The study determines that the centered approach includes a significant relationship on learner's performance as compared with the traditional semester approach and it helps in developing the research competencies within learners.

According to Quidmas (2017), to boost the standard performance of teachers particularly in research, capacity building is extremely important. Capacity buildings like a seminar that are challenging are going to be helpful in doing a probe. This may give them the opportunity to grasp more about the importance of action research and have additional experiences that may help them to be more active in action research writing (Anzoldo et al., 2019). A newspaper article detected that professional development is taken into account to be a vehicle through which teachers are being given the prospect to reinforce their knowledge and skills. Within the prevalent variety of professional development, action research deliberates the characteristic of effective professional development which supports student's learning.

Lejarde (2017), in his study, reveals that teachers are ready to concentrate on specific classroom needs of the learners that needed attention in finishing up research work. It also helps teachers to critically and analytically evaluate their pedagogy and to find what's effective in improving classroom practice. It also justifies the actions made which will be helpful for them in building repertoire, identify problems, and arrive improvement solutions.

According to Pena (2018), the research could be a factor to be considered in improving the school's curriculum for teacher researchers, school administrative staff, and other stakeholders within the teaching and learning environment. The most goal of the research is to define ways on the way to enhance the lives of the scholars within the education and at the identical time, to reinforce the lives of these professionals who are working within the tutorial systems.

Galarion (2018), the research could be a valuable practice to undertake for teachers because it offers a collaborative, systematic, and participatory process of research that actively searches for areas of concern or redress for teachers. Additionally, research provides teachers with specialized knowledge and technical skills which can require influencing constructive change within classrooms, schools, and communities.

According to Marcelo (2018), research may be a logical process to review and collect data that will help teachers and other educational personnel to acknowledge and develop their practice. Any teacher or a school-based question, topic, or problem is very important to research and will be accustomed start the method of conducting research. Research has dramatically gained support from educators, but others don't view it as a legitimate style of research and inquiry.

### Objectives of the Study

The objective of the study was to explore the attitude of faculty teachers of two schools towards research activities.

### Research Questions

The study was intended to probe the subsequent research questions

1. How school teachers' attitudes influence their research activities?
2. How do reward, personal interest, and research use influence school teachers' research activities?

### Methodology

The present study employed a descriptive survey method and geared toward finding the effect of reward, research use, and personal interest of the research work. How the independent variables of research attitude affect i.e. kind of interest, use of research, and reward and motivate the individual towards research writing.

### Research Design

Quantitative-descriptive research design was employed in the study. It is a means to describe and examine the perception of the teachers in action research that will serve as a variable in the study. The variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures.

### Participants

The participants of the study were seventy-seven (77) secondary school teachers in two center schools of Zhemgang and Sarpang, Bhutan, who were chosen purposively since the lead researcher is part of the current teaching force. It represented the total population of the secondary school in Bhutan.

### Research Instrument

The research tools used during the study is the psychometric properties of a Attitudes Toward Research Scale of Rasch rating scale analysis, scale with 33 items (ATR-30) and it is a self-report measure of teachers' attitudes towards research. The modified version was adapted from the 32-item ATR.

Two items had negative discrimination values and were eliminated leading to a 32-item version.

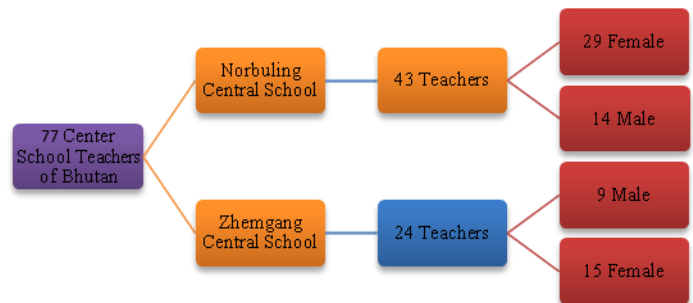


Fig. 1 Participants of the study

### Reliability and validity of the Tools

A Rasch residual principal component analysis (PCA) yielded one factor. Respondents were asked to point their level of agreement to statements associated with some aspects of educational research employing a 5-point rating scale from 1 to five. Using undergraduate teachers for the sample, the reliability was acceptable (person reliability = .94 and item reliability = 1.00).

### Statistical Techniques

Means, S.D's, and t-test were used to compare the school teachers of two districts in terms of personal interest, reward and research use. Coefficient of Correlation was also found out to check the relationship between genders and types of professional qualification amongst the teachers under different districts.

### Results and Discussions

After running down through the SPSS following are the result generated in the output and interpretation down accordingly.

Table 1. Shows the mean score of different schools pertaining to rewards, personal interest, and research use. Zhemgang CS shows (mean=3.89, SD=.557) in research influences research, (mean=4.11, SD=.510) in personal interest and (mean=4.044, SD=.617) in research use. The mean from the above table shows higher in all the factors which indicates that there is higher spread of mean and the SD shows the minute spread in sample data from the mean. It is an indication that the teachers of Zhemgang CS have a higher demand for rewards, greater personal interest, and fully understand the research use in carrying out the research work in the schools. The variance also shows smaller values (minimal in spread of values) within the three factors which is an indication that they are identical and nearer to the mean.

**Table 1. Showing mean and SD of different factors between school teachers of Norbuling CS and Zhemgang CS**

Report				
Name of School		1. Rewards influences Research	2. Personal Interest	3. Research Use
Zhemgang CS	Mean	3.898	4.1111	4.04444
	Std. Deviation	.5570	.51000	.617914
	variance	0.310	0.260	0.382
Norbuling CS	Mean	3.708	4.0000	4.01388
	Std. Deviation	.8667	.70711	.950357
	variance	0.751	0.500	0.903
Total	Mean	3.832	4.0725	4.033816
	Std. Deviation	.6805	.58332	.743479
	variance	0.463	0.340	0.553

Regarding the Norbuling CS, the static shows (mean=3.70, SD=.866) in rewards influence research, (mean=4.11, SD=.510) in personal interest and (mean=4.01, SD=.950) in use of research. The teacher of Norbuling CS seems a bit relax in all three dimensions and the spread of the SD shows more spread from the mean. It may be because of more

exposure to the research comparing with the teachers of Zhemgang CS. It can be concluded that the teachers of Norbuling aspect less reward in working on research and the personal interest is also more comparing with teachers of Zhemgnag CS.

**Table 2. One-way ANOVA between different factors with respect to different schools**

			Sum of Squares	Df	Mean Square	F	p value	Remarks
1. Rewards influences Research * Name of School	Between Groups	(Combined)	.562	1	.562	1.217		Insignificant
	Within Groups		30.928	67	.462		.275	
	Total		31.490	68				
2. Prsonal Intrest * Name of School	Between Groups	(Combined)	.193	1	.193	.564		Insignificant
	Within Groups		22.944	67	.342		.455	
	Total		23.138	68				
3. Research Use, * Name of School	Between Groups	(Combined)	.015	1	.015	.026	.872	Insignificant
	Within Groups		37.573	67	.561			
	Total		37.588	68				

**P<0.05≠Ho P≥0.05 = Ho**

Table 2. It shows the differences between the mean score of teachers of two district pertaining to factor I, reward influences teachers and the p value is =.275>0,005 which is spastically not significant at the both the level of confidence.

Factor II shows the p-value of .455 is a different mean score of different school teachers about personal interest. The p value = .455>0.05 which is statically insignificant at both the level of confidence.

Factor III shows the p-value of .872 is different mean score among different school teachers in relation to Research use.

The p value = .872 > 0.05 which is statically insignificant at both the level of confidence. Therefore, it is being concluded that there is no significant relationship between each of the three factors about the interest of carry out the research work in the school. The teachers feel that the research is of their interest there is very little influence of reward on research interest.

Table 3. Shows mean and SD in of teachers' qualification in respect to reward, personal interest, and research use. The PTC consist of 6.3% of teachers unveil the reward influences (mean=3.950, SD=.342), personal interest (mean=4.125, SD=.595) and research use (mean=4.250, SD=.5000). It shows negligible differences in mean but in SD the personal

**Table 3. Qualification of teachers’ influences on reward, personal interest, and usage report**

Your highest qualification			1. Rewards influences	2. Personal Interest	3. Research Use
d i m e n s i o n o	PTC	Mean	3.950	4.1250	4.250
		Std. Deviation	.3416	.59512	.50000
		Variance	.117	.354	.250
	B.Ed	Mean	3.923	4.1371	4.1720
		Std. Deviation	.5858	.58037	.6258
		Variance	.343	.337	.392
	PGDE	Mean	3.552	3.8929	3.5873
		Std. Deviation	.9141	.65941	.90002
		Variance	.836	.435	.810
	M.Ed	Mean	4.033	4.2083	4.3888
		Std. Deviation	.3892	.45017	.46781
		Variance	.152	.203	.219
	Total	Mean	3.829	4.0735	4.0343
		Std. Deviation	.6853	.58759	.74899
		Variance	.470	.345	.561

interest shows the greater distribution indication the greater personal concern of teachers on writing research. Next, B.Ed consisting of 47.4% of sample shows the (mean=3.923, SD=.585) on reward influence, (mean=4.137, SD=.580) in personal interest, (mean=4.172, SD=.625) in research use. It shows very little means on three factors but there shows disturbing differences in research use indicating the concern shown by teachers in use. Maybe they are confused about the use of research in their professional and personal life. In PGDE which consists of 21.1% of the sample shows the (mean=3.552, SD=.914) in reward influences, (mean=3.892, SD=.659) in personal interest and (mean=3.587, SD=.900) in research use. It shows the greater distribution of SD in reward influences over research indicating the teacher's demand for both intrinsic and extrinsic motivation to research the school.

Lastly, M.Ed consisting of 24.2% second highest of the sample after B.Ed, shows (mean=4.033, SD=.389) in reward influences, (mean=4.208, SD=.450) in personal interest and (mean=4.388, SD=.467) in research use shows more distribution in personal interest and research use. It means that they are aware of the use of research and have developed an interest towards research and the reward doesn't influence their interest according to the score.

Finally, the finding reveals that the master and PGDE teachers are fully aware of the research use and their interest are developed after understanding the use in their daily life. The B.Ed and PTC teachers still need motivation through rewards and another support system from the schools.

**Discussion**

From the above finding, it is understood that the teachers from Norbuling CS have a better understanding of the research and its use comparing with teachers of Zhemgang CS. They tend to have more interest and motivation through reward is very less among them. The teachers from the

Zhemgang CS still need to encourage in writing research and the result shows they the reward is very important to influence them. The second finding shows the insignificant among different factors indicating the co-relation is not that strong and still, they function independently meaning the reward is required only to a handful of teachers. Likewise, self-interest and knowing the research use depend on the individual and it's nothing to do with the whole population. Finally, the largest number of the sample consisting of B.Ed and PGD does show more interest in writing research which cannot be motivated by reward but there are still a small group of teachers PTC who demand rewards to motivate them in research writing both from school and education ministry.

**Conclusion and Recommendation**

Teacher research has the potential to play a major role within the enhanced professionalization of teaching, but it'll never be the complete agenda for college reform. As we've shown, there are complex problems involved even in calling for teacher research. As Myers (1985) rightly argues that teachers ought to do teacher research is...an in-adequate thanks to beginning. To encourage teacher research, we must first address incentives for teachers, the creation and maintenance of supportive networks, the reform of rigid organizational patterns in schools, and also the hierarchical power relationships that characterize most of the schooling.

Likewise, to resolve the problematic relationship between academic research and teacher research it will be necessary to confront controversial problems with voice, power, ownership, status, and role within the broad educational community. We aren't arguing that teacher research must occupy a privileged position regarding research on teaching. Rather we are suggesting that pursuit of the problems the divide research on teaching and teacher research may help raise critical questions about the character of data for teaching and hence enhance research in both communities.



Communities for teacher research participation in teacher research requires considerable effort by innovative and dedicated teachers to stay in their classrooms while carving out opportunities to inquire and reflect on their own practice (Smith et al., 1990). Teacher research is unlike school-based research, which occupies an unquestioned position in the middle of the institution's mission.

Furthermore, the educational research community is organized to produce formal and informal opportunities for response and critique. Based on the results of this study, it is suggested to grant adequate importance to writing research in teacher training, conduct studies towards eliminating teachers' unwillingness and negative attitudes toward writing research, perform writing activities to boost the writing perception on effecting research work and eliminate writing anxiety and fear, and incrementally do procedure-based writing training.

### Consent for publication

The author declares that the work has consent for publication.

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### References

Anzaldo, G. D., & Cudiamat, M. A. (2019). Teachers' Perception in Writing Action Research in a Public Elementary School in the Philippines. *International Educational Research*, 2(3), 15-22.

- Bell, R. (2016). The Continuing search to find a more effective and less intimidating way to teach Research Methods in Higher Education. *Innovations in Education and Teaching International*, 53(3), 285-295.
- Erero, E. J. (2000). Towards the Nigerian University of the 21st century: Challenges and Opportunities. *Nigerian Administration and beyond the year*.
- Galarion, M. P. (2018). Action Research: Why it matters? *Sun Star Pampanga*.
- Lejarde, B. L. (2017). Action Research as an Integral Part in the Teaching Profession. *Sun Star*.
- Marcelo, L. M. (2018). Contracting School-Based Action Research. *Panay News*.
- Myers, M. (1985). The teacher-researcher: How to study writing in the classroom. Urbana, IL: National Council of Teachers of English.
- Pachanawan, A. (2009). The Model of Research Competency Development with Participatory Action Research Process. *Journal of Education*, 20(2): 59-76.
- Pena, C. D. (2018). Developing Professionally. *Sun Star Pampanga*.
- Plotnikova, N. I. (2007). Educational Competence in the Structure of a Distance Course in English. *Competencies in Education: experience design*, 123-134.
- Quidmas, J. S. (2017). Master Teachers' Seminar Workshop on Capability Building on Action Research and Basic Research Proposal Writing. *Sun Star Baguio.Pampanga*.
- Şahan, H. H. & Tarhan, R. (2015). Scientific Research Competencies of Prospective Teachers and their Attitudes toward Scientific Research.
- Smith, M. C. & Lytle, S. L. (1990). Research on Teaching and Teacher Research: The Issues That Divide. *American Educational Research Association*, 19(2), 2-11.
- Ushakov, A. A. (2008). Development of Research Competence of Pupils of Secondary Education in Subject-Oriented Training.
- Williams, R. & Van Dyke, N. (2008). Reputation and Reality: Ranking major Disciplines in Australian universities. *Higher Education*, 56(1), 1-28.
- Wodarski, J. S. (1991). Promoting research productivity among university faculty: An Evaluation. *Research on Social Work Practice*, 1(3), 278-288.

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