URL: http://dx.doi.org/10.31703/grr.2020(V-II).26

DOI: 10.31703/grr.2020(V-II).26



Cite Us



Research Attitude of Prospective Teachers: An Analysis of Universities of Rawalpindi and Islamabad

Nazir Haider Shah *	Robina Ka	ausar †	Sidra S	Younas ‡
Vol. V, No. II (Spring 2020)	I	Pages: 246	5 – 256	www.gfriournal.dam
p- ISSN: 2616-955X	e-ISSN: 2663-7030	ISS	N-L: 2616-955X	GRR ODDE BERTON

The attitude of prospective teachers regarding educational research is one of the challenges that is linked with education. It's not commonly known that why teachers do not use research to solve instructional problems, but probably it is in connection with the attitude of teachers regarding educational research. A group of prospective teachers was administered by the updated scale. In the final scale, exploratory factor analysis had a significant relationship. The main factors that have an effect on the attitudes of teachers regarding educational research were; teachers' individual interest in conducting research, educational research's value, and benefits of research skills for teachers. The study concluded that teachers' attitude was connected to and in the influence with frequency and intensity of their experience to education research. Those teachers have a more positive attitude towards educational research and have just done a professional development course that has a focus on education research.

Key Words: Research, Research Attitude, Prospective Teachers

Introduction

In several ways, teachers learn about educational research as well as programs that are related to teacher education, professional growth, and their own professional understanding. Practically, to accept practice for staying at research grounds relies upon an understanding of educators, their opinions, and viewpoints. In fact, the government has authorized the prospective teacher to use the findings that are based on scientific grounds found from educational research, as their attitude for educational research is unknown. Richardson (1996) has pointed toward teachers' attitude, which is influenced by their own behaviour, so their attitude toward educational research should be measured to let policymakers and researchers find better places to share the results with practitioners. This study was purposed to upgrade the present but old and invalid scale, the Attitudes toward Education Research Scale (ATERS), the validation of an upgraded scale for measurement of teachers' attitude in favour of educational research. Furthermore, the goals were to analyze designated demographic factors relevant to teacher's attitude in favour of educational research and to examine teachers' learning about practicing, based on research to use in the classroom.

Davis (2007) and Kaestle (1993) indicated that for many years, the research of practicing gaps in education was being discussed including educational research and policy circles. It focused on the discussion that has an absence of connection among education research and classroom experts. The What Works Clearinghouse (WWC) came into existence in 2002 in favour of educators, researchers, and policymakers to make them ease by sharing results based on scientific methods of study. One of the main goals of What Works Clearinghouse is to facilitate prospective teachers by providing them information that would be helpful in making decisions based

^{*} Assistant Professor, Department of Education, University of Kotli, Azad Jammu and Kashmir, Pakistan. Email: nazirshah786@gmail.com

[†] PhD Scholar, Department of Education, Mohi-Ud-Din Islamic University Nerian Sharif, Azad Jammu and Kashmir,

[‡] PhD Scholar, Department of Education, Mohi-Ud-Din Islamic University Nerian Sharif, Azad Jammu and Kashmir, Pakistan.

on evidence. <u>Slavin (2008)</u> stated that though it is a sharing format of disturbing research conclusions, some researchers raise questions on its standards. In addition, teachers' level of using WWC is unknown.

The question regarding teachers' for not seeming in valuing educational research findings was hypothesized by Davis (2007) and Kaestle (1993), but logically it is not clear if prospective teacher valued education research or not. As Myrick (1990), Littman, and Stodolsky (1998) have specified that the research which is conducted on the basis of research findings used by teachers, comprises of professional reading of teachers' studies and various studies where the attitude of pre-service prospective teachers in favour of research was discovered. It is necessary for policymakers and academicians to find prospective teachers' attitudes in favour of education research more deeply to let them use practices based on research, so they would get the understanding of influential points for teaching-learning improvements. Isaksen and Ellsworth (1979) initiated an effort made by this study with upgrading and authenticating the ATERS.

Objectives

- 1. To explore the attitudes of prospective teachers toward Education Research.
- 2. To find out the factors that influence the attitudes of the prospective teacher regarding educational research.

Delimitations of the Study

- Islamabad and Rawalpindi.
- One public sector and one Private Sector University.
- Bachelor and Master's program students of Education Department.
- Session 2018-2019.

Review of the Literature

The objective of this study was to upgrade and authenticate a scale that would be helpful in measuring the attitude of educators regarding education research. Additionally, its first goal was finding out the learnings of prospective teachers, which are related to practices that are research-based and used in classrooms. By reviewing this goal, in this section, the history of research on attitudes will be discussed in general, but the attitudes of prospective teachers will be discussed precisely.

Attitudes

Krosnick, Judd, and Wittenbrink (2005) stated that in 1920 and 1930, the research, based on attitudes, was conducted; it happened when Louis Thurstone and Rensis Likert initiated to measure attitudes by using large sets of questions in written tests. During the 20th century, these attitudes were counted in psychology, sociology, and education fields. Richardson (1996) mentioned about education research that, from 1950 to 1970, this research focused on attitude research specifically because it was acquiring to found teachers' attitudes and qualities by which their behaviour in the classroom can be predicted. The discrimination among attitudes, beliefs, intents, and deeds is elaborated in reasoned action theory. Previously, grouped attitudes and beliefs were in combination by many researchers e.g. Rokeach (1968) defined an attitude is a group of many opinions which have focused upon a specified objective. Fishbein and Azjen's brought a notable change in research methods by focusing on the attitudes of prospective teachers than their beliefs by accepting the use of attitudes in research. Richardson (1996) observed that a standard change in research method happened at this time; it put great stress on teachers' beliefs instead of teachers' attitudes.

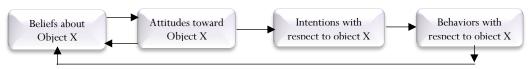


Figure 1: The Theory of Reasoned Action

Vol. V, No. II (Spring 2020) Page | 247

Reasoned action theory is quite helpful to understand the attitudes and beliefs of prospective teachers regarding education research that possibly is related to use in classroom teachings which are based on research findings. The key part of this theory is the dissimilarity between attitudes, beliefs, intentions, and actions. According to Fishbein and Azjen (1975), attitude is a combination of three elements which are: emotional, mental, and conative; or viewpoints, opinions, and activities. Attitude is an emotional element that holds emotions of a person, which he expresses for an object, person, issue, or event, whereas his knowledge, opinions, thoughts, and beliefs are held by the cognitive component. A person's behavioural intents and activities toward an object are referred to by cognitive component. Furthermore, Fishbein and Azjen (1975) have differentiated behavioural intentions to an object and behaviours to an object. This theory recommends that people's attitudes are determined by their beliefs about an object, but their beliefs are less prejudiced by their attitudes. In response, the behavioural intentions of people are inclined by their attitudes which have an impact on their behaviours. It might be possible that the actions and behaviour of a person have an effect on their beliefs.

As proposed by reasoned action theory, generally, behavioural intentions of prospective teachers are inclined by their attitudes and can be found practically regarding education research. Even though school systems and prospective teachers are encouraged by policymakers to hold activities in school that is based on research. Usually, the educators wouldn't prefer to use education research conclusions in sorting out classroom problems.

Education Research

Morrison (2009) defined education research as a difficult and organized study into different characteristics of education comprised of teaching, learning, school environment, teacher education, and classroom-based activities. The positivist approach comprises of hypothesis testing that inclines with quantifiable research approaches, and realistic approaches, which includes with emphasis on qualitative research approaches are involved. Cresswell (2002) elaborates that education research helps in adding a topic, duplicating knowledge and dissimilar viewpoints on a topic to the set of knowledge. He further stated research that its importance is defined by its ability to suggest the improvements in practice. Commonly, educational research contains the research which is based on university and based on school, teacher research.

Educators' Opinions, Viewpoints, and Observations of Educational Research

In the literature, the beliefs and attitudes of prospective teacher about education research are discussed frequently and individually, but their difference is yet to be cleared. Pajares (1992) points towards his view that it is not important to construct beliefs and attitudes individually, but measurement of attitudes for better understanding of something is more important. According to a research, Miretsky (2007), Gore and Gitlin (2004) initiated teachers' beliefs towards action research that they found it unrelated, too theoretic, and that can easily be manipulated by researchers. By nature, the researches based on the beliefs of prospective teacher are qualitative mainly. It basically has a focus on teachers' negative perception of education research. Generally, the researchers want to get the understanding of research to practice gaps lay in education and why the research findings are used in a little quantity by the prospective teacher to notify about classroom practice. A quantitative analysis of attitudes of prospective teachers regarding education research will be allowed by the progress of a scale that can examine the attitudes of prospective teachers to education research. Its study would make a better understanding of research for practicing gap in education with the viewpoint of ultimate "end users."

Gore and Gitlin (2004) defined with the help of survey and meeting, having 85 pre-service educators and 147 working educators in Australia and the U.S., they observed that for education research, both the groups have dissimilar opinions. Additionally, 82% of last year pre-service educators indicated that sometimes educational research was directed towards their worries for instruction, but 8% described the same feelings. The difference between perception of both the groups about research proposes that after completion of their professional training, their beliefs regarding research changed impressively afterward they attain real-world experience about teaching. Precisely, a prospective teacher who participated in the study declared that they want a practical application from education research and neglected the theoretical part of academic research.

Attitudes Regarding Scales of Educational Research

One more instrument for the measurement of attitudes of the prospective teacher regarding education research was created, also used it in the study. To facilitate the improvement of courses of pre-service teacher education programs, Attitudes Toward Education Research Scale (ATERS) came into existence. It is an ordinal scale of fifty items, where students rated the degree in response of agreement or disagreement by a statement about education research. With the help of an original sample of 236 graduates and undergraduates, the internal consistency was originated, and the help of coefficient alpha at 0.92, estimation was done. According to researchers, the ATERS has the ability to find a difference in pre-post courses. Those students who had finished the course of education research presented more positive attitudes notably, rather than those who were at the initial stage (t=1.802, df=111, p< .05). This scale was used among dissimilar groups as pre-post assessment in education research; the researchers initiated that the mean score for students was relatively higher after completion of the program (t=9.82, df=30, p< .05). In conclusion, they further stated that ATERS is quite useful to assess the attitude of the pre-service prospective teacher regarding education research. They also were of opinion that this tool could be beneficial to facilitate the development of education research courses. This scale was not investigated with practicing teachers.

ATERS was used by Benton and Jerrolds (1984) to study the association between attitudes and achievements regarding education research program, understanding point of view, grade point average (GPA), and National Teacher Examination (NTE) scores. Eighty prospective teachers were involved as participants who were graduates enrolled in an education research course. Regarding the reading scale, twenty-six items were used by researchers that measured the attitudes of students concerning reading connected to learning, recreational and overall reading. The course instructors have created two multiple-choice examinations to measure achievement. Among the scores of ATERS and graduate GPA (r=.42, p<.01), amongst Attitudes Toward Education Research Scale score and course attainment (r=.37, p<.01) and among Attitudes Toward Education Research Scale score and understanding viewpoints (r=.31, p<.01), it was comparatively low and statistically significant correlation found by the researchers. As indicated in the research of Benton and Jerrold's that their sample who were teachers, have a more positive attitude for education research after succeeding in graduate education course. Same as that prospective teacher who has a positive attitude regarding reading, also contain more positive attitude for education research.

Proposed Factors

Only a factor analysis was not involved in the actual study of the ATERS, but a modification of the original ATERS is involved in the present study, additionally the results from the studied scale from the analysis of a factor. Previously, the evaluation of research findings was discussed to theorise the factors. The five following factors that were hypothesized in relevancy with attitudes of the prospective teacher regarding education research are; research experience of teachers, the significance of teaching conclusions, application practicality, support of school for using education research findings, and convenience of research.

Knowledge with Study

The first hypothesized factor was previous experiences of prospective teachers gained through education research. This factor involved the participation of prospective teachers in research studies, whether their involvement is as a researcher or participant, both are inclined of proper university study and teacher study. Probably, the concentration of prospective teachers in paying attention to educational research is relevant to teachers' attitudes for this research. According to prior research, it is declared that the teachers' collaboration with the researchers of university, contains positive beliefs about education research. Miretsky (2007) further added that prospective teachers pointed towards teacher research by mentioning it as a means of engaging teachers' interest in education research.

Relevancy among Findings of Research

Perception of prospective teacher relevant to research findings was the second hypothesized factor. Frequently,

Through short in-service programs, prospective teachers get introduction of research educations, but its irrelevancy to teaching was complained by most of the teachers.

The practicality of Application of Findings

Teachers' observation towards practicality of education research findings was the third factor that was hypothesised. The prior researches indicated that the prospective teacher are of view to make findings practical. Therefore, it would be able to help the prospective teacher to become an effective teacher in the classroom.

School's Assistance in Utilizing Findings of Research

As in previous studies, it is indicated that support for research from administration and peers affects attitudes of teachers. A report from pre-service internees sheded light on the point that may be they would not be interested in searching out education research findings as they didn't witness of any participation of prospective teachers who used research findings in their teaching methods.

Accessibility of Research

<u>Shkedi (1998)</u> stated that the fifth theorized factor which is related to attitudes of the prospective teacher regarding education research is the perception of prospective teachers of the availability and accessibility of education research findings. In this perception, physical and conceptual accessibility both are involved. <u>Carnine (1997)</u> determines that if prospective teacher want to be present or up-to-date about research findings relevant to their field, then they should have knowledge of finding research reports and summaries of research findings and must have the ability to read and interpret conclusions as well.

Methodology

This study was conducted to explore the impact of research attitude of prospective teachers; quantitative aspects were considered while exploring the attitude of prospective teachers. The participants of the questionnaire was university-level students of Rawalpindi and Islamabad. Descriptive research design was used in this study. The participants for quantities aspects were students studying in B.Ed., M.Ed., and M.Sc Education. The population contained the students studying in education departments of selected public and private sector universities of Rawalpindi and Islamabad. There were 322 students in two selected public and private universities of Islamabad and Rawalpindi. A number of students were counted through the roll number sheets collected from the related departments of social sciences. Furthermore, the total number is added to gain the total population of students. One public sector and one private sector universities were selected. One public and one Private Sector University was selected to participate in the study through stratified random sampling technique. Selection of participants from two universities is supported by the standards provided by Krejcie and Morgan (1970) out of 322 students, 50 students were selected. A questionnaire for students was developed to attain the responses from the respondents. The questionnaire was based on five-point Likert scale. Pilot testing was carried out to diagnose the deficiencies in the questionnaire. For study validation and reliability, a pilot study was conducted in one university of Rawalpindi district, which included 20 respondents. Respondents of the pilot study were excluded from the final sample of the study. The validity of the scale was determined through the experts working in different universities. The suggested changes by the educationists and subject specialists were addressed, and the tool is modified as required. The reliability of the scale is determined through Cronbach's Alpha, and all the factors are found reliable, that is, the value of alpha is was acceptable. Chronbach's alpha value for factors was 0.812. The researcher personally visited the sampled public and private universities of Islamabad and Rawalpindi for data collection. The questionnaire were personally administered by the researcher to collect data from respondents to fulfill the study. To analyze the collected data SPSS version 22 was used. Data was collected, scored, tabulated, and analyzed by chi-square association. Mean, and standard deviation was applied to examine the association.

Results

Table 1. Analysis of Responses

S. No	Statement (n=50)		SA	A	N	D	SD
1	I enjoy reading textbooks and articles	f	15	12	7	11	05
	on education that have relevant research	%	30	24	14	22	10
	results.	Mean $(\overline{x}) = 3.42$, Star	ndard	Devi	ation	$(\sigma) =$	1.37
2	Educational research reveals important	f	18	12	7	9	4
	information about the teaching process.	%	36	24	14	18	8
		Mean $(\overline{x}) = 3.62$, Star	ndard	Devi	ation	$(\sigma) =$	1.34
3	I do not want to be involved in	f	22	13	4	8	3
	educational research at the school.	%	44	26	8	16	6
		Mean $(\overline{x}) = 3.86$, Star	ndard	Devi	ation	$(\sigma) =$	1.30
4	When faced with a teaching problem, a	f	28	15	4	2	1
	good strategy is to seek help from	%	56	30	8	4	2
	research findings on the problem.	Mean $(\overline{x}) = 4.34$, Star	ndard	Devi	ation	$(\sigma) = 0$	0.93
5	Educational research training can enable	f	27	11	6	5	1
	teachers to observe classroom behaviors	%	54	22	12	10	2
	and problems more effectively.	Mean (x) =4.16, Star	ndard	Devi	ation	$(\sigma) = 0$	1.10

Table 1 indicates the prospective teachers' response the statement I like to read textbooks and articles in education which are well documented with relevant research findings the mean (3.42) and standard deviation (1.37) indicates that majority of students were agree to the statement, for the statement Educational research has revealed important information about the teaching-learning process the mean (3.62) and standard deviation (1.34) indicates that majority of students were agree to the statement, I have no desire to become involved in educational research in the schools the mean (3.86) and standard deviation (1.34) indicates that majority of students were agree to the statement, When faced with a teaching problem, a good strategy is to go to the research findings on the problem for help the mean (4.34) and standard deviation (0.93) indicates that majority of students were agree to the statement, Training in educational research can make a teacher a more effective observer of classroom behaviour and problems the mean (4.16) and standard deviation (1.10) indicates that majority of students were agree to the statement.

Table 2. Analysis of Responses

S. No	Statement (n=50)		SA	A	N	D	SD
6	Educational studies courses are valuable	f	22	17	4	7	0
	to educated students.	%	44	34	8	14	0
		Mean $(\bar{x}) = 4.08$, Sta	ndard	Devi	ation	(σ) =	1.04
7	It is important for teachers to know how	f	23	16	5	4	2
	to find research that addresses issues and	%	46	32	10	8	4
	problems that may arise in teaching.	Mean $(\overline{x}) = 4.08$, Sta	ndard	Devi	ation	(σ) =	1.11
8	Teachers have a responsibility to	f	24	15	2	6	3
	participate in scientific research in education through collaborative	%	48	30	4	12	6
	classroom research activities.	Mean $(\overline{x}) = 4.02$, Sta	ndard	Devi	ation	(σ) =	1.24
9	Teachers do not need training in	f	20	15	3	8	4
	educational research.	%	40	30	6	16	8
		Mean $(\overline{x}) = 3.78$, Sta	ndard	Devi	ation	(σ) =	1.33
10		f	21	13	7	5	4
		%	42	26	14	10	8

Vol. V, No. II (Spring 2020)

S. No	Statement $(n=50)$		SA	A	N	D	SD
	Education professors should do more to encourage students to have a positive attitude toward educational research.	Mean $(\overline{x}) = 3.84$, Star	ndard	Devi	ation	(σ) =	1.29

Table 2 indicates the prospective teachers' response the statement Courses in educational research are of value to students in education the mean (4.08) and standard deviation (1.04) indicates that majority of students were agree to the statement, for the statement It is important for teachers to know how to locate research that addresses itself to questions and problems that may arise in their teaching the mean (4.08) and standard deviation (1.11) indicates that majority of students were agree to the statement, Teachers have a responsibility for participating in the scientific study of education through cooperative classroom research activities the mean (4.02) and standard deviation (1.24) indicates that majority of students were agree to the statement, Teachers do not need to receive training in educational research the mean (3.78) and standard deviation (1.33) indicates that majority of students were agree to the statement, Professors of education should make greater efforts to encourage positive student attitudes toward educational research the mean (3.84) and standard deviation (1.29) indicates that majority of students were agree to the statement.

Table 3. Analysis of Responses

S. No	Statement(n=50)		SA	A	N	D	SD
11	In preparing students for a new subject	f	22	14	7	4	1
	area, teachers are not required to read	%	48	28	14	8	2
	research articles on the subject.	Mean $(\overline{x}) = 4.12$, Star	ndard	Devi	ation	(σ) =	1.05
12	Understanding the methods used by	f	20	17	5		2
	education researchers can help teachers take a more systematic approach to	%	40	34	10	2	4
	educational problems.	Mean $(\overline{x}) = 3.94$, Star	ndard	Devi	ation	(σ) =	1.16
13	The methods used in educational research	f	13	24	4	7	2
	represent a logical way to obtain information about educational issues.	%	26	48	8	14	4
		Mean $(\bar{x}) = 3.78$, Star	ndard	Devi	ation	(σ) =	1.10
14	Reading research articles related to	f	16	21	4	` Ź	2
	teaching is not very interesting.	%	32	42	8	14	4
		Mean $(\overline{x}) = 3.84$, Star	ndard	Devi	ation	(σ) =	1.14
15	Knowledge of educational research	f	23	12	5	8	2
	techniques does little to help teachers	%	46	24	10	16	4
	evaluate the effectiveness of educational programs.	Mean $(\overline{x}) = 3.92$, Star	ndard	Devi	ation	(σ) =	1.25

Table 3 indicates the prospective teachers' response the statement When preparing a new subject area for students, a teacher does not need to read the research articles available on that subject the mean (4.12) and standard deviation (1.05) indicates that majority of students were agree to the statement, for the statement An understanding of the methods used by educational researchers can help teachers take a more systematic approach to solving educational problems the mean (3.94) and standard deviation (1.16) indicates that majority of students were agree to the statement, The methods used in educational research represent a logical way to obtain information about a problem in education the mean (3.78) and standard deviation (1.10) indicates that majority of students were agree to the statement, It is not very interesting to read research articles relating to teaching the mean (3.84) and standard deviation (1.14) indicates that majority of students were agree to the statement, Knowledge of educational research techniques is of little help to teachers in assessing the effects of educational programs the mean (3.92) and standard deviation (1.25) indicates that majority of students were agree to the statement.

Table 4. Analysis of Responses

S. No	Statement (n=50)		SA	A	N	D	SD
16	Most educational innovations would	f	24	15	5	4	2
	not have happened without the efforts of educational researchers.	%	48	30	10	8	4
	of educational researchers.	Mea	$n(\bar{x}) = 4$.10, Stand	ard Devia	tion (σ)	=1.12
17	I want to do some research in my own	f	12	19	5	10	4
	class.	%	24	38	10	20	8
		Mea	$n(\bar{x}) = 3$.50, Stand	ard Devia	tion (σ)	=1.27
18	I prefer university teachers in	f	12	23	5	7	3
	education courses who bring	%	24	46	10	14	6
	significant research into their teaching.	Mea	$n(\bar{x}) = 3$.68, Stand	ard Devia	tion (σ)	=1.16
19	I would prefer to work for a principal	f	15	20	5	8	2
	who has not committed to doing	%	30	40	10	16	4
	research in the school.	Mea	$n(\bar{x}) = 3$.76, Stand	ard Devia	tion (σ)	=1.16
20	Educational research methods confuse	f	15	23	4	7	1
	me.	%	30	46	8	14	2
		Mea	$n(\bar{x}) = 3$.88, Stand	ard Devia	tion (σ)	=1.05

Table 4 indicates the prospective teachers' response the statement Most innovations in education would not have occurred without the efforts of educational researchers the mean (4.10) and standard deviation (1.12) indicates that majority of students were agree to the statement, for the statement I would like to carry out some research in my own classroom the mean (3.50) and standard deviation (1.27) indicates that majority of students were agree to the statement, I prefer college instructors in education courses who bring important research findings into their instruction the mean (3.68) and standard deviation (1.16) indicates that majority of students were agree to the statement, I would prefer to work for a principal who does not have a commitment to doing research in his school the mean (3.76) and standard deviation (1.16) indicates that majority of students were agree to the statement, Educational research methods are confusing to me the mean (3.88) and standard deviation (1.05) indicates that majority of students were agree to the statement.

Table 5. Factors that includes Attitudes of Prospective Teacher Regarding Educational Research

S. No	Responses' Theme	No. of Respondents	Percentage
1	Read textbooks	18	36%
2	Well documented article reading	7	14%
3	Training requirement	12	24%
4	Interest in scientific method	8	16%
5	Participating in Seminars	5	10%
Total		50	100%

Table 5 indicate factors that include attitudes of prospective teacher regarding educational research. First factor was reading text books only for prospective teacher to take part in attitude regarding research is 36 %. The second factor was reading well documented articles for a prospective teacher to take part in attitude regarding research is 14 %. Training requirement (24%) is also a factor of developing an attitude in prospective teachers. Forth factor was interest in scientific method for a prospective teacher to take part in attitude regarding research is 16 %. In last but not least, participation in seminars (10 %) is also a factor of developing an attitude in prospective teachers.

Vol. V, No. II (Spring 2020) Page | 253

Discussion

The study exposed that most of the prospective teachers said that their institutions provide sufficient research based academic support to them, they also opined that their teachers used research based knowledge while delivering knowledge. The above mentioned finding is consistent with Gitlin et al. (1999) they conducted a study to assess the research attitude of the prospective teachers and explained that students who possess a research attitude can easily grasp subject matter that is difficult to understand. Through reasonable research knowledge with students can care for their academic practices as well as their overall wellbeing. Papanastasiou (2005) further identified applications of research is not only essential in regular education but it is also the essential factor of higher-level learning because student must be sensitive for the learning of students even in higher education. Collaborating these views, Feistritzer (2011) has opined that students must provide individual attention to learn research based practices and students which ultimately result in effective learning of students. Research based attitude also enhances the motivational level of the students which results in self-regulatory learning of the students in higher education. Research attitude is associated with higher level of student learning.

Conclusion

Based on the results of the study it is concluded that teachers' attitude is connected to and in the influence with frequency and intensity of their experience to education research. Those teachers have a more positive attitude towards education research who have just done a professional development course which has focus on education research. Correspondingly, teachers who have taken part in teacher research and those who reported learning about research results from their personal professional reading, revealed positive attitude scores. Experienced teachers learned better about research from professional reading than those who have less experience in research. From the findings of this study, it was recommended that less experience of education research has less effect on teachers than to those who are more experienced. By means of attitudes regarding education research, it is found that whether teachers learn about education research findings from pre-service school activities or by their principals, they are not different from teachers who did not learn about these findings by any source. To remove research practice gaps, it is necessary to put stress on education research deeply in pre-service activities.

Recommendations

On the bases of conclusions, it is recommended that teachers should be experienced to teach students about most current research with methods based, they must pursue experience to be more experienced in research education. In various ways such as, by reading education or subject field literature, get enrolled in graduate education or professional development classes where they are being emphasized to use education research or its findings and by getting engaged in teacher research. So that when teachers face any difficulty regarding classroom or instructional, they should refer the relevant education research to solve it accordingly and apply it in their own classroom.

In pursuance of preparing teachers for evaluating and to use findings of education research, the programs of university graduate education and professional development must consist of reading and use of education research to be experienced. Teachers should be clearly taught about research skills consisting critical analysis of research studies and hypothesis generation. Additionally, those courses that can promote teacher research or action research should be encouraged to pursue articles about education research and utilizing findings for their classroom teaching.

The administrators and coordinators of staff development programs must be promoted in contemplation of preparing teachers for evaluating and using education research findings so that expressive and long-term experiences can be gained. In planning of short in-service programs which are common in schools, it would be a challenge, but it can raise the use of education research by teachers probably. Including education and in other areas as well, there is no such instant fix.

References

- Azjen, I. (2005). Attitudes, Personality and Behavior. New York, NY: McGraw-Hill.
- Benton, S., & Jerrolds, B. (1984). The relationship of graduate education students' achievement in educational research to their reading attitudes, attitudes toward educational research, GPAs and National Teacher Examinations. In G. McNinch (Ed.), American Reading Forum Online Yearbook, (IV). http://www.americanreadingforum.org/Yearbooks/84_yearbook/volume84toc.htm
- Bilgili, Y. (2005). *The teachers' process of change through action research*. Available from ProQuest Dissertations and Theses database. (AAT 183041)
- Carnine, D. (1997). Bridging the research to practice gap. Exceptional Children, 63, 513-521. http://journals.cec.sped.org/ec/
- Creswell, J. W. (2002). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, New Jersey: Pearson Education, Inc.
- Davis, S. (2007). Bridging the gap between research and practice: What's good, what's bad, and how can one be sure? *Phi Delta Kappan*, 88, 569-578. http://www.kappanmagazine.org/
- Fishbein, M., & Azjen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley. http://www.people.umass.edu/aizen/f&a1975.html
- Gitlin, A., Barlow, L., Burbank, M., Kauchak, D., & Stevens, T. (1999). Preservice teachers' thinking on research: Implications for inquiry oriented teacher education. *Teaching and Teacher Education*, 15, 753-769. doi:10.1016/S0742-051X(99)00015-3
- Gore, J., & Gitlin, A. (2004). [Re]Visioning the academic-teacher divide: Power and knowledge in the educational community. *Teachers and Teaching: Theory and Practice*, 10, 35-58. doi:10.1080/13540600320000170918
- Hiebert, J., Gallimore, R., & Stigler, J. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational Researcher*, 31(5), 3-15. doi:10.3102/0013189X031005003
- Isakson, R., & Ellsworth, R. (1979). The measurement of teacher attitudes toward educational research. Educational Research Quarterly, 4(2), 12-18.
- Kaestle, C. F. (1993). The awful reputation of education research. Educational Researcher, 22, 23,26-31. doi:10.2307/1177303
- Krosnick, J., Judd, C., & Wittenbrick, B. (2005). The measurement of attitudes. In D. Albarracin, B. Johnson, & M. Zanna (Eds.) *The Handbook of Attitudes* 71-86. Mahwah, NJ: Lawrence Erlbaum Associates.
- Littman, C. B., & Stodolsky, S. S. (1998). The professional reading of high school academic teachers. Journal of Educational Research, 92, 75-84. doi:10.1080/00220679809597579
- Miretzky, D. (2007). A view of research from practice: Voices of teachers. Theory Into Practice, 46, 272-280. doi:10.1080/00405840701593857
- Morrison, K. (2009). Research methods in education, sixth edition. New York: Routledge.
- Myrick, H. J. (1990). Education journal reading habits of public elementary school teachers. Available from ProQuest Dissertations and Theses database. (AAT 9033129)
- Pajares, F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62, 307-332. doi:10.2307/1170741
- Papanastasiou, E. (2005). Factor structure of the "Attitudes Toward Research" scale. Statistics Education Research Journal, 4(1), 16-26. Retrieved from http://isi.cbs.nl/SERJ.HTM
- Richardson, V. (1994). Conducting research on practice. Educational Researcher, 23(5), 5-10. doi:10.2307/1177027
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J.
- Sikula, T. Buttery, & Guyton, E. (Eds.) Handbook of Research on Teacher Education (2nd Ed., pp. 102-119). New York, NY: Macmillan.
- Ritchie, G. (2006). *Teacher research as a habit of mind*. Available from ProQuest Dissertations and Theses database. (AAT 3206130)

- Rokeach, M. (1968a). Beliefs, attitudes, and values: A theory of organization and change. San Francisco, CA: Jossey-Bass. Rokeach, M. (1968b). The role of values in public opinion research. The Public Opinion Quarterly, 32, 547-559. doi:10.1086/267645
- Shkedi, A. (1998). Teachers' attitudes towards research: A challenge for qualitative researchers. *International Journal of Qualitative Studies in Education*, 11, 559-577. doi:10.1080/095183998236467
- Short, B., & Szabo, M. (1974). Secondary school teachers' knowledge of and attitudes toward educational research. *Journal of Experimental Education*, 43, 75-78.
- Sivadge, L. (2005). Teachers' perceived changes in practices and students' learning as a result of implementing teacher action research. Available from ProQuest Dissertations and Theses database. (AAT 3187911)
- Slavin, R. E. (2008). Perspectives on evidence-based research in education--what works? Issues in synthesizing educational program evaluations. *Educational Researcher*, 37, 5-14. DOI: 10.3102/0013189X08314117
- Williams, D., & Coles, L. (2007). Teachers' approaches to finding and using research evidence: An information literacy perspective. *Educational Research*, 49, 185-206. doi:10.1080/00131880701369719
- Zeuli, J., & Tiezzi, L. (1993). Creating contexts to change teachers' beliefs about the influence of research. East Lansing, MI: National Center for Research on Teacher Learning. Retrieved from the ERIC database. (ED364540)