

## Teachers Research Perception, Competence and Work Performance: Basis for A Capability Building Plan

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### Abstract

This study investigated and explored the research perception, competence and work performance of teachers which was made basis for a capability building plan.

This study further examined the teachers' level of research perception in the area of time, cost, and knowledge as well as the teachers' level of competence in the area of ability to work under pressure, ability to communicate, and technology capability in relation to their work performance. With the use of a qualitative research approach and a sample size of 155 teachers' the data of the research perception, competence and work performance of teachers were collected.

The findings revealed that there are no significant differences in the level of research perception and competence when each area is grouped according to the variable of highest educational attainment, number of trainings attended and length of service. It also revealed that there are significant differences existed in the level of teachers work performance specifically in the variable of educational attainment and length of service. It also revealed that there is no significant relationship existed between the level of research perception of District Murcia II teachers and their work performance. And there is a significant relationship existed between the level of research competence of District Murcia II teachers and their work performance. A proposed capability building plan was made to address the problem of teachers in terms of their level perception and competence in action research writing.

**Keywords:** Capability Plan, Competence, Performance, Research Perception, Teachers

### Introduction

Research is the creation of new knowledge and or the use of existing knowledge in a new and creative way to generate new concepts, methodologies, and understandings. This definition of research encompasses pure and strategic basic research in which teachers at all levels are required to develop new knowledge which is directed towards a specific objective, including a client-driven purpose.

As observed, teachers from public schools are required to conduct action research as stated in the Regional Memorandum No. 04 s 2020, a Call for Basic Education Research Fund 2020. As stipulated in the Region-wide Research Priorities, encouraging teachers to conduct action research. In line with this topic of interest for BERF 2020 included topics on improving access to basic education, strengthening standards, curriculum, instruction, and assessment. Instituting learning and development, accelerating governance, policy analysis and research, and disaster risk reduction and management.

Action research writing for teachers is important as this enables teachers to try new and updated teaching strategies and modern trend pedagogies, which would help them to identify which kind of learning strategy works best in a specific classroom setting. It also addresses learners' different needs and helps select and evaluate instructional materials for the learner's varied learning styles.

According to Wulandari et al. (2019), teachers perceive action research writing as a burden mentally, physically, and financially. This is somewhat true since it is an additional workload; however, not all teachers perceive it the same way. Others look at action research as an instrument for improving classroom

development. Moreover, Research competence refers to one's facility to undertake high-quality studies (Salom, 2013). Ismail et al. (2012) theorized it as an "ability to carry out data collection involving planning and selecting appropriate data collection tools or instruments, identifying an appropriate method for interpreting and manipulating data, and applying an appropriate statistical tool for the test of significance besides understanding."

According to Quidmas (2017), capacity building is very important to improve teachers' quality performance, particularly in research. DepEd already issued also DepEd Order No. 16 series 2017, entitled "Research Management Guidelines," to localize the research implementation among school levels. Capacity building, such as challenging seminars, will be helpful in doing action research. This will allow them to know more about the importance of action research and have additional experiences that will help them be more active in action research writing.

Teachers categorically become researchers and have always been linked to teachers' professional development in the field of education. This is to enable the teachers to try new and updated teaching strategies and modern trend pedagogies. This will help them to identify which strategy will work best in a specific classroom setting. It will also address the learner's different needs and help select and evaluate instructional materials for the learner's varied learning styles.

Even though research is believed to play a central role in the development of learning practices, most teachers look at research as an activity outside their regular work. Most teachers only focus on teaching activities and assume that even the idea of participating in research into the teacher's professional assignments is unrealistic. Dealing with these issues, only a few research related to teachers' perceptions, competence, and work performance. Pramswari (2017) focused on elementary school teachers toward classroom action research, but there needs to be previous research on teachers' research perception, competence, and work performance. Therefore, this research was conducted to know how teachers perceive, how competent, and how it affects their work performance in school.

It was found that assessing the research perception, competence of teachers, and work performance sparked the interest of school leaders and instructional leaders to seek and identify similar attributes that contributed to the resiliency and interest of the teachers in researching the Division of Negros Occidental, District of Murcia II for School Year 2021-2022.

## **Methodology**

### **Research Design**

A descriptive research design was used by the researcher since it wanted to know the action research perception and capabilities of teachers in Murcia, District II.

Descriptive research aims to describe the nature of the situation as it exists at the time of the study (Alberto et al., 2016). Moreover, this research design is known as a statistical research tool that describes data and characteristics of the population or phenomenon being studied. Subsequently, the study wanted to know what the perception of teachers in Murcia II is and how capable they are in terms of writing and conducting action research.

The said research design is most appropriate in this study as it sought to describe the circumstances experienced in this study which could help measure the level of perception and capabilities of the teacher researchers.

### **Respondents of the Study**

The respondents of the study were elementary school teachers in the District of Murcia II, Division of Negros Occidental. There was a total of 257 elementary teachers. Slovin's formula was used to obtain a sample size of 155 elementary teachers from the total population that was taken as actual respondents of the study from the 14 elementary schools in the District of Murcia II, Division of Negros Occidental. Random sampling was used in the selection of the teacher respondents.

### **Data Gathering Instrument**

The instrument consisted of three parts.

Part I of the questionnaire composed of the profile of the respondents, which composed of Highest Educational Attainment, Number of Training Attended, and Length of Service

Part II was the teachers' perception in conducting action research conceptualized by Kunander (2018) in terms of time, cost, and knowledge. Each area has eight indicators rated by the respondents using the five-point Likert scale of strongly agree, agree, moderately agree, disagree, and strongly disagree.

Part III of the instrument was the teacher competence conceptualized by Pati (2016) in terms of the ability to work under pressure, communicate, and use technology. Each area has eight indicators to be rated using the five-point Likert scale using the strongly agree, agree, moderately agree, disagree, and strongly disagree.

### ***Validity***

Validity is the appropriateness, correctness, meaningfulness, and usefulness of a researcher's specific inferences based on the data collected. According to Heale et al. (2015), validity is the extent to which a concept is accurately measured in a quantitative study.

Prior to its use, the data-gathering was subjected to the following tests: a test of validity to ascertain whether the instrument can really gather the data necessary to answer the specific problems in this study; and a test of reliability to determine the stability of the instrument in soliciting responses for the test items when repeatedly administered to various respondents under various physical conditions.

The validity of the instrument that will be used in this study was tested using face validation and content validation. For face validation, the instrument was submitted to five experts in the field of action research; The 1<sup>st</sup> validator is the District Action Research Coordinator and District English Coordinator of Murcia II; she is a Master Teacher II in the said district and a Doctorate degree holder. The 2<sup>nd</sup> validator is a Master Teacher I and the District Reading Coordinator at the district of Murcia II and a Doctoral Degree holder. The 3<sup>rd</sup> validator is the District Supervisor of Talisay District II and a Doctoral degree holder, and the 4<sup>th</sup> juror is a Graduate Studies professor at one of the Universities in Bacolod and a Doctoral degree holder. The 5<sup>th</sup> validator is an Internship Supervisor at STI-West Negros University and a Doctoral degree holder.

Using the validation survey with the criteria set forth by Good and Scates, the average result is 4.72, interpreted as "Very High Validity."

### ***Reliability***

The reliability technique that was used in this study is the Cronbach Alpha reliability technique. According to J Barbera (2020), Cronbach Alpha is a reliability test used to measure the internal consistency of a test or scale, which is expressed by 0 and 1, where a reliability coefficient of .70 or higher is considered acceptable. The responses of these individuals were subjected to a reliability test using Cronbach's Alpha. Cronbach Alpha was used to measure how well a set of items (or variables) measures a single un-dimensional latent construct. The researcher administered the instrument to Thirty (30) respondents coming from the same district who were not included in the actual respondents of the study. The result of the reliability test is "acceptable," which indicates that the instrument used is reliable and suited for the data-gathering procedure. Specifically, the alpha coefficient for the 30 items is 0.846, interpreted as "high" and considered acceptable.

### **Data Gathering Procedure**

Permission to conduct the study was secured from the adviser. Afterward, the request from the Office of the District Supervisor of Murcia II was forwarded for approval. The researcher then was allowed to distribute the instruments to the 155 elementary public schools in the District of Murcia, Division of Negros Occidental, using online data or messenger or social media.

Personally, the researcher distributed the questionnaires online with the assistance of the respective school heads. Upon retrieval of the accomplished research tool, the researcher intently tallied and analyzed using the Statistical Package for Social Sciences (SPSS) software. Subsequently, tables were constructed for easier interpretation.

### **Ethical Consideration**

This dissertation paper tried hard to minimize the risk of harm to its corresponding respondents by guaranteeing them the privacy and confidentiality of their responses and by securing their anonymity throughout the whole research process. From the beginning, the researcher asked for the respondent's consent, assured them that all responses would be undisclosed to the public, and assured them of their right to withdraw from their research participation if necessary.

### **Analytical Schemes**

The scheme that was used is based on the objectives of the study were the descriptive, comparative analytical, and relational analytical schemes.

Objective no. 1, the descriptive-analytical scheme, was used to determine the profile of respondents in terms of highest educational attainment, length of service.

Objective no. 2, the descriptive-analytical scheme, was used to determine the teachers' level of research perception in terms of time, cost, and knowledge.

Objective no. 3, the descriptive-analytical scheme, was used to determine the teachers' level of research competence in terms of ability to work under pressure, ability to communicate, and Technology capability.

Objective no. 4, the descriptive-analytical scheme, was used to determine the teachers' level of research perception according to the areas, time, cost, and knowledge.

Objective no. 5, the descriptive-analytical scheme, was used to determine the teachers' level of research competence according to the areas of ability to work under pressure, ability to communicate, and technology capability.

Objective no. 6, the descriptive-analytical scheme, was used to determine teachers level of work performance.

Objective no. 7, the comparative analytical scheme, was used to determine the significant difference in the teachers' level of research perception when they are grouped and compared according to the variables.

Objective no 8, the comparative analytical scheme, was used to determine the significant difference in the teachers' level of research competence when they are grouped and compared according to the variables.

Objective no 9, the comparative analytical scheme, was used to determine the significant difference in the teachers' level of work performance when they were grouped and compared according to the variables.

Objective no. 10, the relational analytical scheme, was used to determine the significant relationship between teachers' research perception and teachers' work performance.

Objective no. 11, the relational analytical scheme, was used to determine the significant relationship between the teachers' research competence and teachers' performance.

### **Statistical Tools**

In the analysis of data, the following statistical tools were used following the nature of the specific problems raised and their corresponding hypotheses:

Objective no. 1, frequency count, and percentage were used to determine the profile of respondents in terms of highest educational attainment, Number of trainings attended, and length of service.

A percentage frequency distribution is a display of data that specifies the percentage of observations that exist for each data point or grouping of data points. It is a particularly useful method of expressing the relative frequency of survey responses and other data (Lesvin 2016).

Objective no. 2, the mean, was used to determine the teachers' level of research perception according to the following areas, time, cost, and knowledge.

The statistical mean has a wide range of applicability in various types of experimentation. This type of calculation eliminates random errors and helps to drive a more accurate result derived from a single experiment. The statistical mean can also be used to interpret statistical data. Some important properties make statistical mean very useful for measuring central tendency (Granger, 2017).

### **The mean scores were interpreted as follows:**

<b>Range</b>	<b>Verbal Interpretation</b>
4.50 – 5.00	Very High Level
3.50 – 4.49	High Level
2.50 – 3.49	Moderate Level
1.50 – 2.49	Low Level
1.00 – 1.49	Very Low Level

Objective no. 3, the mean was used to determine the teachers' level of research competence according to the following areas, ability to work under pressure, ability to communicate, and technology capability.

Objective no. 4, the mean, was used to determine the teachers' level of research perception in the area of time, cost, and knowledge according to the profile variables.

Objective no. 5, the mean was used to determine the teachers' level of research competence in terms of ability to work under pressure, to communicate, and technology capability when grouped according to the profile variables.

Objective no. 6, the mean, was used to determine the teachers' level of work performance based on the IPCRF when grouped according to variables.

To determine the performance of teachers in research as evidenced by the IPCR or Individual Performance Commitment Review. This rating scale is based on the Civil Service Commission Memorandum Circular No. 06, series of 2012, which sets the guidelines for establishing and implementing the Strategic Performance Management System (SPMS) in all government agencies.

<b>Weighted Means</b>	<b>Description</b>	<b>Interpretation</b>
4.50-5.00	Outstanding	Performance represents an extraordinary level of achievement and commitment in terms of quality and time, technical skills and knowledge, ingenuity, creativity, and initiative. Employees at this performance level should have demonstrated exceptional job mastery in all areas of responsibility. Employee achievement and contributions to the organizations are of marked excellence.
3.50-4.49	Very Satisfactory	Performance exceeded expectations. All goals, objectives, and targets were achieved above the established standards.
2.500-3.499	Satisfactory	Performance met expectations in terms of quality of work, efficiency, and timeliness. The most critical annual goals were met.
1.500-2.499	Unsatisfactory	Performance failed to meet expectations, and/or one or more of the goals were not met.
below 1.499	Poor	Performance was consistently below expectations, and/or reasonable progress toward critical goals was not made. Significant improvement is needed in one or more important areas.

Objective no. 7, Mann-Whitney U, was used to determine the difference in the teachers' level of research perception when grouped according to the variables.

Objective no. 8, Mann-Whitney U, was used to determine the difference in the teachers' level of research competence when grouped according to the variables.

Objective no 9, Mann-Whitney U, was used to determine the significant difference in the teachers' level of work performance when grouped according to the aforementioned variables.

Mann-Whitney U test is a nonparametric test of the null hypothesis that is equally likely that a randomly selected value from one sample will be less than or greater than a randomly selected value from a second sample. This test can be used to determine whether two independent samples were selected from a population having the same distribution; the similar nonparametric test used on dependent samples is the Wilcoxon signed rank test (Kerby, 2015).

Objective no. 10, Spearman Rank Correlation Coefficient, was used to determine the significant relationship between the teachers' level of research perception and teachers' work performance.

Objective no. 11, Spearman Rank Correlation Coefficient, was used to determine the significant relationship between the teachers' level of research competence and teachers' work performance.

## Results and Discussion

**Table 2**

*Profile of the Respondents*

Variables	Category	Frequency	Percentage
Educational Attainment	Lower (Bachelor's Degree)	95	61.3
	Higher (Master & Doctorate Degrees)	60	38.7
	<b>Total</b>	<b>155</b>	<b>100.0</b>
Number of Training	Lower (less than 8 trainings)	72	46.5
	Higher (8 trainings & more)	83	53.5
	<b>Total</b>	<b>155</b>	<b>100.0</b>
Length of service	Shorter (less than 10 years)	74	47.7
	Longer (10 years & more)	81	52.3
	<b>Total</b>	<b>155</b>	<b>100.0</b>

Tables 2 shows the profile of elementary teachers as respondents of the study from the Division of Negros Occidental during the school year 2021-2022 in terms of educational attainment, number of training and length of service. As shown in the table 2, there were a total of 155 elementary teachers in the District of Murcia II, in terms of educational attainment, the lower group which are teachers acquiring bachelor's degree were 95 or 61.3%. while the higher group which are teachers acquiring master's and Doctorate degree were 60 or 38.7 %. In Number of Trainings, the lower group which are teachers getting less than 8 trainings were 72 or 46.5%. While the higher group wherein teachers getting more than 8 trainings were 83 or 53.5. In terms of length of service, 74 of 47.4% belonged to the shorter group which are the teachers having less than 10 years teaching experience and 81 or 52.3% belonged to the longer group which are teacher having more than 10 years teaching experience.

**Table 3 :** Level of Teachers' Research Perception in the Area of Time

TIME Items	Mean	Interpretation
1. make it in just a short period	3.01	Moderate Level
2. make it without affecting my other workloads.	3.11	Moderate Level
3. make it efficiently.	3.52	High Level
4. increase my productivity.	3.45	Moderate Level
5. provide myself more opportunities for improvement	3.49	Moderate Level
6. help myself stay focus and organize in my work	3.61	High Level
7. manage interruptions	3.72	High Level
8 can use my spare time effectively for my research work	3.56	High Level
<b>Overall mean</b>	<b>3.43</b>	<b>Moderate Level</b>

Table 3 presents the level of teachers' research perception in the area of time. Generally, the level of teachers' research perception in the area of time has an overall mean score of 3.43 and was interpreted as "moderate level".

The table further reveals that the item no. 7 which states that "manage interruptions" got the highest mean score of 3.72 and is interpreted as "high level" while Item No. 1 which states that "make it in just a short period of time" got the lowest mean score of 3.01 and is interpreted as "moderate level."

**Table 4 : Level of Teachers' Research Perception in the Area of Cost**

<b>COST Items</b>	<b>Mean</b>	<b>Interpretation</b>
1. have the funds for the expenses needed.	3.98	High Level
2. provide materials/ resources needed.	3.36	Moderate Level
3. produce survey materials.	3.69	High Level
4. conduct of actual survey in schools without using a lot of funds.	3.83	High Level
5. afford to pay for my statistician's fee.	3.37	Moderate Level
6. retrieve survey materials without using a lot of funds.	3.81	High Level
7. afford to Hire experts for the analysis of data for accuracy of results.	3.63	High Level
8. bind manuscript for publication.	3.76	High Level
<b>Overall mean</b>	<b>3.68</b>	<b>High Level</b>

Table 4 presents the level of teachers' research perception in the area of cost. The overall mean scores of elementary teachers were 3.68 and were interpreted as "high level". The table further reveals that item no. 1 which states "have the funds for the expenses needed." had the highest mean score of 3.98 and is interpreted as "High Level" while item no. 2 which states "provide materials/resources needed" has the lowest mean score of 3.36 and is interpreted as "Moderate Level".

**Table 5 : Level of Teachers' Research Perception in the Area of Knowledge**

<b>KNOWLEDGE Items</b>	<b>Mean</b>	<b>Interpretation</b>
1. identify research problem.	3.71	High Level
2. formulate hypothesis.	3.74	High Level
3. provide appropriate research literature.	3.33	Moderate Level
4. identify appropriate research design to be used.	3.34	Moderate Level
5. perform actual experimentation.	3.25	Moderate Level
6. write and analyze data.	3.66	High Level
7. formulate conclusion and recommendations.	3.83	High Level
8. identify appropriate intervention plan.	3.36	Moderate Level
<b>Overall mean</b>	<b>3.53</b>	<b>High Level</b>

Table 5 presents the level of teachers' research perception in the area of knowledge. Results have shown that the overall mean score of elementary teachers was 3.53 and was interpreted as "high level".

The table further reveals that item no. 7 which states "formulate conclusion and recommendations" got the highest mean score of 3.83 and is interpreted as "High Level" while Item no. 5 which states that "Perform actual experimentation" got the lowest mean score of 3.25 and is interpreted as "Moderate Level".

**Table 6 : Level of Teachers' Research Competence in the Area of Ability to Work Under Pressure**

<b>Ability to Work under Pressure Items</b>	<b>Mean</b>	<b>Interpretation</b>
1. manage multiple tasks.	2.80	Moderate Level
2. set smaller task and more achievable targets.	4.15	High Level
3. take a break and takes things slowly.	3.21	Moderate Level
4. do important tasks that need the most energy and concentration.	4.26	High Level
5. manage issues that come up regularly.	3.74	High Level
6. make changes accordingly.	3.52	High Level
7. create a prioritization strategy.	3.67	High Level
8. see it as fun tasks.	3.74	High Level
<b>Overall mean</b>	<b>3.64</b>	<b>High Level</b>

As indicated in Table 6, the level of teachers' research competence in the area of ability to work under pressure. The overall mean scores of elementary teachers were 3.64 and were interpreted as "high level". The table further reveals that item no.2 which states "Do important tasks that need most energy and

concentration” got the highest mean score of 4.26 which is interpreted as to “high level” while item no. 1 which states “Manage multiple tasks” got the lowest mean score of 2.80 and in interpreted as ‘Moderate Level”

**Table 7 :** Level of Teachers’ Research Competence in the Area of Ability to Communicate

Items	Mean	Interpretation
1. simplify my language.	3.54	High Level
2. provide accurate information.	4.36	High Level
3. communicate ideas in a timely fashion.	3.41	Moderate Level
4. share important information.	3.81	High Level
5. collaborate with others.	3.74	High Level
6. listen carefully to the suggestions of others.	3.44	Moderate Level
7. keep being creative.	3.13	Moderate Level
8. present my research in various ways.	3.35	Moderate Level
<b>Overall mean</b>	<b>3.60</b>	<b>High Level</b>

As shown in Table 7, the level of teachers’ research competence in the area of ability to communicate is “High Level” with an overall mean of 3.60. Generally, the table further reveals that item no. 2 which states “provide accurate information” got the highest mean score of 4.36 and is interpreted as to “high level” While item no. 7 which states “Keep being creative” got the lowest mean score of 3.13 and is interpreted as “Moderate Level”. The result implies that most teachers can provide accurate information in terms of writing action research yet have a minor problem in terms of creative writing

**Table 8 :** Level of Teachers’ Research Competence in the Area of Technological Capability

Items	Mean	Interpretation
word processing skills.	3.45	Moderate Level
E-mail management skills.	3.96	High Level
electronic presentation skills	4.13	High Level
video conferencing skills.	3.55	High Level
educational copyright knowledge.	2.83	Moderate Level
computer-related storage devices (knowledge, disk, USB Drives, DVDs, Etc.).	3.86	High Level
knowledge in downloading software from the Web (knowledge including eBook).	3.39	Moderate Level
database skills.	4.12	High Level
<b>Overall mean</b>	<b>3.66</b>	<b>High Level</b>

Presented in Table 8 is the level of teachers’ research competence in terms of the area of technological capability. The data reveal that the overall average mean of teachers’ research competence level is 3.66 and is interpreted as to a “high level”. The table further reveals that item no. 3 which states “electronic presentation skills” got the highest mean score of 4.13 and is interpreted as “high level”. While Item no. 5 which states “Educational Copyright Knowledge” got the lowest mean score of 2.83 and is interpreted as “Moderate Level”.

**Table 9 :** Level of Teachers’ Research Perception in the Area of Time When Grouped According to Highest Educational Attainment

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. make it in just a short period.	3	Moderate Level	3.03	Moderate Level
2. make it without affecting my other workloads.	3.05	Moderate Level	3.21	Moderate Level
3. make it efficiently.	3.41	Moderate Level	3.7	High Level
4.increase my productivity.	3.33	Moderate Level	3.63	High Level

5. provide myself more opportunities for improvement	3.48	Moderate Level	3.5	High Level
6. help myself stay focus and organize in my work	3.67	High Level	3.51	High Level
7. manage interruptions	3.74	High Level	3.68	High Level
8 can use my spare time effectively for my research work	3.51	High Level	3.63	High Level
<b>Overall Mean</b>	3.40	Moderate Level	3.48	Moderate Level

Table 9 presents the level of teachers' research perception in the area of time when grouped according to highest educational attainment. Generally, the overall mean of the study obtained 3.40 as to moderate level when respondents were grouped as lower level (bachelor's degree) while 3.48 as to moderate level when respondents were grouped as higher level (master's degree or doctorate degree). Specifically, for the lower group, item no. 7 states that teachers can "manage interruptions" got the highest mean score of 3.74, interpreted as "high level" while item no. 1 which states that teachers can "make it in just a short period of time" got the lowest mean score of 3.00, interpreted as "Moderate Level". In terms of the Higher Group, item no. 3 states that "make it efficiently" got the highest mean score of 3.70, interpreted as "High Level" while item no. 1 which states that "make it in just a short period of time" also got the lowest mean same with the lower group having the mean score of 3.03, interpreted as "Moderate Level."

**Table 10 :** Level of Teachers' Research Perception in the Area of Time When Grouped According to Number of Trainings Attended

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. make it in just a short period.	3.15	Moderate Level	2.89	Moderate Level
2. make it without affecting my other workloads.	3.29	Moderate Level	2.96	Moderate Level
3. make it efficiently.	3.59	High Level	3.45	Moderate Level
4. increase my productivity.	3.58	High Level	3.33	Moderate Level
5. provide myself more opportunities for improvement	3.72	High Level	3.28	Moderate Level
6. help myself stay focus and organize in my work	3.70	High Level	3.53	High Level
7. manage interruptions	4	High Level	3.48	Moderate Level
8 can use my spare time effectively for my research work	3.68	High Level	3.45	Moderate Level
<b>Overall Mean</b>	<b>3.59</b>	<b>High Level</b>	<b>3.30</b>	<b>Moderate Level</b>

Table 10 presents the level of teachers' research perception in the area of time when grouped according to number of trainings attended. Generally, the overall mean of the study obtained in the lower group (8 trainings and below) is 3.59 as to high level while in the higher group (8 trainings and more) is 3.30 and described as moderate level. Specifically, as for the "lower group" (8 trainings and below) an indicator that got the highest mean score of 4.00 is item no. 7 which states "can manage interruptions" and is interpreted as "high level" while the indicator that got the lowest mean score of 3.15 is item no. 1 which states "make it in just a short period of time" and is interpreted as "moderate level". As for the "higher group" (8 trainings and below) an indicator that got the highest mean score of 3.53 is item no. 6 which states "help myself stay focus and organize in my work" and is interpreted as "high level" while the indicator that got the lowest mean score of 2.89 is item no. 1 which states "make it in just a short period of time" and is interpreted as "moderate level".

**Table 11 :** Level of Teachers’ Research Perception in the Area of Time When Grouped According to Length of Service

Items	Shorter		Longer	
	Mean	Interpretation	Mean	Interpretation
1. make it in just a short period.	3.08	Moderate Level	2.95	Moderate Level
2. make it without affecting my other workloads.	3.21	Moderate Level	3.02	Moderate Level
3. make it efficiently.	3.60	High Level	3.44	Moderate Level
4. increase my productivity.	3.51	High Level	3.39	Moderate Level
5. provide myself more opportunities for improvement	3.59	High Level	3.39	Moderate Level
6. help myself stay focus and organize in my work	3.62	High Level	3.60	High Level
7. manage interruptions	3.89	High Level	3.56	High Level
8 can use my spare time effectively for my research work	3.72	High Level	3.40	Moderate Level
<b>Overall Mean</b>	3.53	High Level	3.34	<b>Moderate Level</b>

As shown in Table 11, the level of teachers’ research perception in the area of time when grouped according to the length of service.

Generally, the overall mean of the study obtained is 3.53 as to high level when respondents were grouped as to shorter (less than 10 years) while 3.34 as to moderate level when respondents were grouped as to longer (more than 10 years). Specifically, as for the shorter group (less than 10 years) the indicator that got the highest mean score of 3.89 is item no. 7 which states “manage interruptions” and is described as to “high level”. While the indicator that got the lowest mean score of 3.08 is item no. 1 which states “make it in just a short period of time” and is described as to “moderate level” As for the longer group (more than 10 years), the indicator that got the highest mean score of 3.60 is item no. 6 which states “help myself stay focus and organized in my work” and is described as “high level”. While the indicator that got the lowest mean score of 2.95 is item no. 1 which states “make it just in a short period of time” and is described as to “moderate level”

**Table 12 :** Level of Teachers’ Research Perception in the Area of Cost When Grouped According to Highest Educational Attainment

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. have the funds for the expenses needed.	3.96	High Level	4.01	High Level
2. provide materials/ resources needed.	3.27	Moderate Level	3.51	High Level
3. produce survey materials.	3.63	High Level	3.8	High Level
4. conduct of actual survey in schools without using a lot of funds.	3.77	High Level	3.93	High Level
5. afford to pay for my statistician’s fee.	3.28	Moderate Level	3.51	High Level
6. retrieve survey materials without using a lot of funds.	3.73	High Level	3.95	High Level
7. afford to Hire experts for the analysis of data for accuracy of results .	3.54	High Level	3.78	High Level
8. bind manuscript for publication.	3.72	High Level	3.83	High Level
<b>Overall Mean</b>	3.61	<b>High Level</b>	3.79	<b>High Level</b>

Table 12 shows the level of teachers’ research perception in the area of cost when grouped according to educational attainment.

The overall mean of the study obtained by the lower group (bachelor’s degree) is 3.61 and is interpreted as “High Level”. While the higher group (masters’ degree and the doctoral) obtained 3.79 and is interpreted as “High Level”.

Specifically, on the lower group (bachelor’s degree), the indicator that got the highest mean score of 3.96 is item no. 1 which states “ have the funds for the expenses needed” and is interpreted as “High Level”.0

While the indicator that got the lowest mean score of 3.27 is item no. 2 which states “provide materials/resources needed” and is interpreted as “Moderate Level”.

As for the higher group (Masteral degree and Doctoral degree), the indicator that got the highest mean score of 4.01 is item no. 1 which states “ have the funds for the expenses needed” and is interpreted as “High Level”. While the indicator that got the lowest mean score of 3.51 is item no. 2 which states “provide materials/resources needed” ang item no. 5 which states” afford my statistician’s fee” and is both interpreted as “Moderate Level”.

**Table 13:** Level of Teachers’ Research Perception in the Area of Cost When Grouped According to Number of Trainings Attended

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. have the funds for the expenses needed.	3.97	High Level	4	High Level
2. provide materials/ resources needed.	3.45	Moderate Level	3.28	Moderate Level
3. produce survey materials.	3.86	High Level	3.55	High Level
4. conduct of actual survey in schools without using a lot of funds.	3.81	High Level	3.85	High Level
5. afford to pay for my statistician’s fee.	3.58	High Level	3.19	Moderate
6. retrieve survey materials without using a lot of funds.	3.83	High Level	3.80	High Level
7. afford to Hire experts for the analysis of data for accuracy of results .	3.72	High Level	3.56	High Level
8. bind manuscript for publication.	3.81	High Level	3.72	High Level
<b>Overall Mean</b>	3.75	<b>High Level</b>	3.62	<b>High Level</b>

Table 13 shows the level of teachers’ research perception in the area of cost when grouped according to number of trainings attended. Generally, the overall mean of the study obtained is 3.75 as to high level when respondents were grouped as lower number of trainings attended (8 trainings and below) while 3.62 as to high level when respondents were grouped as to higher number of trainings attended (8 trainings and more). Specifically, as for the lower group (8 training and below), the indicator with the highest mean score of 3.97 is item no. 1 which states “have the funds for the expenses needed” and is interpreted as “High Level”. While the indicator with the lowest mean score of 3.45 is item no. 2 which states “provide materials or resources needed” and is interpreted as “Moderate Level”. As for the higher number of trainings attended (8 trainings and more), the indicator that got the highest mean score of 4.00 is item no. 1 which states “Have the funds for the expenses needed” and is interpreted as “High Level”. While the indicator that got the lowest mean score of 3.19 is item 5, which states “ can afford to pay for their statistician’s fee” and is interpreted as “moderate level”.

**Table 14 :** Level of Teachers’ Research Perception in the Area of Cost When Grouped According to Length of Service

Items	Shorter		Longer	
	Mean	Interpretation	Mean	Interpretation
1. have the funds for the expenses needed.	3.93	High Level	4.03	High Level
2. provide materials/ resources needed.	3.44	Moderate Level	3.29	Moderate Level
3. produce survey materials.	3.78	High	3.61	High

4. conduct of actual survey in schools without using a lot of funds.	3.91	High Level	3.76	High Level
5. afford to pay for my statistician's fee.	3.40	Moderate	3.34	Moderate
6. retrieve survey materials without using a lot of funds.	3.87	High Level	3.76	High Level
7. afford to Hire experts for the analysis of data for accuracy of results .	3.78	High Level	3.50	High Level
8. bind manuscript for publication.	3.82	High Level	3.71	High Level
<b>Overall Mean</b>	3.74	High Level	3.63	High Level

As shown in Table 14, the level of teachers' research perception in the area of cost when grouped according to the length of service. Generally, the overall mean of the study obtained is 3.74 as to high level when respondents were grouped as to shorter (less than 10 years) while 3.63 for those respondents who belong to the longer group (more than 10 years) and described as high level. Specifically, as for the shorter group (less than 10 years), the indicator with the highest mean score of 3.93 is item no. 1 which states "have the funds for the expenses needed" and is interpreted as "High Level". While the indicator with the lowest mean score of 3.40 is item no. 5 which states "afford to pay for my statistician's fee" and is interpreted as "Moderate Level". As for the longer group (more that 10 years) the indicator that got the highest mean score of 4.03 is item no. 1 which states "Have the funds for the expenses needed" and is interpreted as "High Level". While the indicator that got the lowest mean score of 3.29 is item no. 2 which states "provide materials/ resources needed" and is interpreted as "moderate level".

**Table 15 :** Level of Teachers' Research Perception in the Area of Knowledge When Grouped According to Highest Educational Attainment

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. identify research problem.	3.71	High Level	3.71	High Level
2. formulate hypothesis.	3.69	High Level	3.83	High Level
3. provide appropriate research literature.	3.25	Moderate Level	3.46	Moderate Level
4. identify appropriate research design to be used.	3.24	Moderate Level	3.51	High Level
5. perform actual experimentation.	3.25	Moderate Level	3.26	Moderate Level
6. write and analyze data.	3.61	High Level	3.75	High Level
7. formulate conclusion and recommendations.	3.74	High Level	3.96	High Level
8. identify appropriate intervention plan.	3.36	Moderate Level	3.35	Moderate Level
<b>Overall Mean</b>	3.48	Moderate Level	3.60	High Level

As shown in Table 15, the level of teachers' research perception in the area of knowledge when grouped according to the educational attainment. Generally, The overall mean of the study for the lower group (bachelor's degree) obtained 3.48 as to moderate level while respondents who belong to the higher group (masters' degree and the doctoral degree) obtained the average mean of 3.60 as to high level. Specifically, as for the lower group (bachelor's degree), the indicator with the highest mean score of 3.74 is item no. 7 which states "Formulate conclusion and recommendations" and is interpreted as "High Level". While the indicator with the lowest mean score of 3.24 is item no. 4 which states "identify appropriate research design to be used" and is interpreted as "Moderate Level". As for the higher group (master's degree and doctoral degree) the indicator that got the highest mean score of 3.96 is item no. 7 which states "formulate conclusion and recommendations" interpreted as "high level". While the indicator that got the lowest mean score of 3.26 is item no. 5 which states "perform actual implementation" and is interpreted as "moderate level".

**Table 16 :** Level of Teachers' Research Perception in the Area of Knowledge When Grouped According to Number of Trainings Attended

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation

1. identify research problem.	3.70	High Level	3.72	High Level
2. formulate hypothesis.	3.83	High Level	3.67	High Level
3. provide appropriate research literature.	3.44	Moderate Level	3.24	Moderate Level
4. identify appropriate research design to be used.	3.41	Moderate Level	3.28	Moderate Level
5. perform actual experimentation.	3.37	Moderate Level	3.15	Moderate Level
6. write and analyze data.	3.77	High Level	3.56	High Level
7. formulate conclusion and recommendations.	3.90	High Level	3.77	High Level
8. identify appropriate intervention plan.	3.33	Moderate Level	3.38	Moderate Level
<b>Overall Mean</b>	<b>3.59</b>	<b>High Level</b>	<b>3.47</b>	<b>Moderate Level</b>

The level of teachers' research perception in the area of knowledge when grouped according to number of trainings attended is shown in table 16. Generally, the overall mean of the study when respondents were grouped as lower number of trainings attended (8 trainings and below) obtained is 3.59 as to high level while respondents who belong to the higher number of trainings attended (8 trainings and more) obtained a mean score of 3.47 as to moderate level. Specifically, as for the lower group (8 trainings and below), the indicator with the highest mean score of 3.90 is item no. 7 which states "Formulate conclusion and recommendations" and is interpreted as "High Level". While the indicator with the lowest mean score of 3.33 is item no. 8 which states "identify appropriate intervention plan" and is interpreted as "Moderate Level". As for the higher group (8 trainings and more) the indicator that got the highest mean score of 3.77 is item no. 7 which states "formulate conclusion and recommendations" interpreted as "high level". While the indicator that got the lowest mean score of 3.15 is item no. 5 which states "perform actual implementation" and is interpreted as "moderate level".

**Table 17 :** Level of Teachers' Research Perception in the Area of Knowledge When Grouped According to Length of Service

Items	Shorter		Longer	
	Mean	Interpretation	Mean	Interpretation
1. identify research problem.	3.83	High Level	3.60	High Level
2. formulate hypothesis.	3.79	High Level	3.70	High Level
3. provide appropriate research literature.	3.32	Moderate Level	3.34	Moderate Level
4. identify appropriate research design to be used.	3.28	Moderate Level	3.40	Moderate Level
5. perform actual experimentation.	3.31	Moderate Level	3.20	Moderate Level
6. write and analyze data.	3.71	High Level	3.61	High Level
formulate conclusion and recommendations.	4.05	High Level	3.62	High Level
8. identify appropriate intervention plan.	3.44	Moderate Level	3.28	Moderate Level
<b>Overall Mean</b>	<b>3.59</b>	<b>High Level</b>	<b>3.47</b>	<b>Moderate Level</b>

The level of teachers' research perception in the area of knowledge when grouped according to the length of service is shown in Table 17. Generally, the overall mean of the study, when respondents were grouped as shorter length of service (less than 10 years) obtained, is 3.59 as to high level while respondents who belong to the longer length of service (more than 10 years) obtained a mean score of 3.47 as to moderate level. Specifically, as for the shorter group (less than 10 years), the indicator with the highest mean score of 4.05 is item no. 7 which states "Formulate conclusion and recommendations" and is interpreted as "High Level". While the indicator with the lowest mean score of 3.28 is item no. 8 which states "identify appropriate intervention plan" and is interpreted as "Moderate Level". As for the longer group (more than 10 years) the indicator that got the highest mean score of 3.70 is item no. 2 which states "formulate hypothesis" interpreted as "high level". While the indicator that got the lowest mean score of 3.20 is item no. 5 which states "perform actual implementation" and is interpreted as "moderate level".

**Table 18 :** Level of Teachers' Research Competence in the Area of Ability to Work Under Pressure When Grouped According to Highest Educational Attainment

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. manage multiple tasks.	2.92	Moderate Level	2.61	Moderate Level
2.set smaller task and more achievable targets.	4.16	High Level	4.13	High Level
3.take a break and takes things slowly.	3.32	Moderate Level	3.05	Moderate Level
4. do important tasks that need the most energy and concentration.	4.28	High Level	4.23	High Level
5. manage issues that come up regularly.	3.70	High Level	3.81	High Level
6. make changes accordingly.	3.43	Moderate Level	3.68	High Level
7. create a prioritization strategy.	3.73	High Level	3.58	High Level
8. see it as fun tasks.	3.70	High Level	3.81	High Level
<b>Overall Mean</b>	3.66	High Level	3.61	High Level

Table 18 presents the level of teachers' research competence in the area of ability to work under pressure when grouped according to highest educational attainment. Generally, the overall mean of the study, when respondents were grouped as lower educational attainment (bachelor's degree) obtained, is 3.66 as to high level while respondents who belong to higher educational attainment (masters and doctoral degree) obtained a mean score of 3.61 as to high level. Specifically, as for lower educational attainment (bachelor's degree), the indicator with the highest mean score of 4.28 is item no. 4 which states "do important tasks that needs the most energy and concentration" and is interpreted as "High Level". While the indicator with the lowest mean score of 2.92 is item no. 1 which states "manage multiple tasks" and is interpreted as "Moderate Level". As for higher educational attainment (master's and doctoral degree) the indicator that got the highest mean score of 4.23 is item no. 4 which states "do important tasks that need the most energy and concentration" and is interpreted as high level. While the indicator that got the lowest mean score of 2.61 is item no. 1 which states "manage multiple tasks" and is interpreted as "moderate level".

**Table 19 :** Level of Teachers' Research Competence in the Area of Ability to Work Under Pressure When Grouped According to Number of Trainings Attended

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. manage multiple tasks.	2.79	Moderate Level	2.81	Moderate Level
2.set smaller task and more achievable targets.	4.11	High Level	4.19	High Level
3.take a break and takes things slowly.	3.12	Moderate Level	3.30	Moderate Level
4. do important tasks that need the most energy and concentration.	4.22	High Level	4.30	High Level
5. manage issues that come up regularly.	3.83	High Level	3.67	High Level
6. make changes accordingly.	3.47	Moderate Level	3.57	High Level
7. create a prioritization strategy.	3.66	High Level	3.68	High Level
8. see it as fun tasks.	3.83	High Level	3.67	High Level
<b>Overall Mean</b>	3.63	High Level	3.65	High Level

Table 19 presents the level of teachers' research competence in the area of ability to work under pressure when grouped according to number of trainings attended. Generally, the overall mean of the study when respondents were grouped as lower number of trainings attended (8 trainings and below) obtained is 3.63 as to "high level" while respondents who belong to higher number of trainings attended (8 trainings and more) obtained a mean score of 3.65 as to "high level". Specifically, as for lower number of trainings attended (8

trainings and below), the indicator with the highest mean score of 4.22 is item no. 4 which states “do important tasks that needs the most energy and concentration” and is interpreted as “High Level”. While the indicator with the lowest mean score of 2.79 is item no. 1 which states “manage multiple tasks” and is interpreted as “Moderate Level”. As for higher number of trainings attended (8 trainings and more) the indicator that got the highest mean score of 4.30 is item no. 4 which states “do important tasks that need the most energy and concentration” and is interpreted as high level. While the indicator that got the lowest mean score of 2.81 is item no. 1 which states “manage multiple tasks” and is interpreted as “moderate level”.

**Table 20 :** Level of Teachers’ Research Competence in the Area of Ability to Work Under Pressure When Grouped According to Length of Service

Items	Shorter		Longer	
	Mean	Interpretation	Mean	Interpretation
1. manage multiple tasks.	2.60	Moderate Level	2.98	Moderate Level
2. set smaller task and more achievable targets.	4.18	High Level	4.12	High Level
3. take a break and takes things slowly.	3.10	Moderate Level	3.32	Moderate Level
4. do important tasks that need the most energy and concentration.	4.36	High Level	4.17	High Level
5. manage issues that come up regularly.	4.09	High Level	3.43	Moderate Level
6. make changes accordingly.	3.62	High Level	3.44	Moderate Level
7. create a prioritization strategy.	3.67	High Level	3.67	High Level
8. see it as fun tasks.	4.09	High Level	3.43	Moderate Level
Overall Mean	3.71	High Level	3.57	High Level

As shown in Table 20, the level of teachers’ research perception in the area of ability to work under pressure when grouped according to the length of service. Generally, the overall mean of the study when respondents were grouped as shorter length of service (less than 10 years) obtained is 3.71 as to “high level” while respondents who belong to longer length of service (more than 10 years) obtained a mean score of 3.57 as to “high level”. Specifically, as for shorter length of service (less than 10 years), the indicator with the highest mean score of 4.36 is item no. 4 which states “do important tasks that needs the most energy and concentration” and is interpreted as “High Level”. While the indicator with the lowest mean score of 2.60 is item no. 1 which states “manage multiple tasks” and is interpreted as “Moderate Level”. As for the longer length of service (more than 10 years) the indicator that got the highest mean score of 4.17 is item no. 4 which states “do important tasks that need the most energy and concentration” and is interpreted as high level. While the indicator that got the lowest mean score of 2.98 is item no. 1 which states “manage multiple tasks” and is interpreted as “moderate level”.

**Table 21 :** Level of Teachers’ Research Competence in the Area of Ability to Communicate When Grouped According to Highest Educational Attainment

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. simplify my language.	3.50	High Level	3.61	High Level
2. provide accurate information.	4.38	High Level	4.33	High Level
3. communicate ideas in a timely fashion.	3.4	Moderate Level	3.45	Moderate Level
4. share important information.	3.71	High Level	3.96	High Level
5. collaborate with others.	3.70	High Level	3.81	High Level

6. listen carefully to the suggestions of others.	3.37	Moderate Level	3.55	High Level
7. keep being creative.	3.13	Moderate Level	3.13	Moderate Level
8. present my research in various ways.	3.30	Moderate Level	3.43	Moderate Level
Overall Mean	3.56	High Level	3.66	High Level

As shown in Table 21, the level of teachers' research competence in the area of ability to communicate when grouped according to the educational attainment. Generally, the overall mean of the study, when respondents were grouped as lower educational attainment (bachelor's degree) obtained, is 3.56 as to "high level" while respondents who belong to higher educational attainment (master's and doctoral degree) obtained a mean score of 3.66 as to "high level". Specifically, as for lower educational attainment (Bachelor's degree), the indicator with the highest mean score of 4.38 is item no. 2 which states "provide accurate information" and is interpreted as "High Level". While the indicator with the lowest mean score of 3.13 is item no. 7 which states "keep being creative" and is interpreted as "Moderate Level". As for Higher educational attainment (master's and doctoral degree) the indicator that got the highest mean score of 4.33 is item no. 2 which states "provide accurate information" and is interpreted as high level. While the indicator that got the lowest mean score of 3.13 is item no. 7 which states "keep being creative" and is interpreted as "moderate level".

**Table 22 :** Level of Teachers' Research Competence in the Area of Ability to Communicate When Grouped According to Number of Trainings Attended

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
1. simplify my language.	3.48	Moderate Level	3.60	High Level
2. provide accurate information.	4.33	High Level	4.39	High Level
3. communicate ideas in a timely fashion.	3.41	Moderate Level	3.42	Moderate Level
4. share important information.	3.80	High Level	3.81	High Level
5. collaborate with others.	3.77	High Level	3.72	High Level
6. listen carefully to the suggestions of others.	3.47	Moderate Level	3.42	Moderate Level
7. keep being creative.	2.98	Moderate Level	3.26	Moderate Level
8. present my research in various ways.	3.40	Moderate Level	3.31	Moderate Level
<b>Overall Mean</b>	3.58	High Level	3.62	High Level

Table 22 shows the level of teachers' research competence in the area of ability to communicate when grouped according to number of trainings attended. Generally, the overall mean of the study when respondents were grouped as lower number of trainings attended (8 trainings and below) obtained is 3.58 as to "high level" while respondents who belong to higher number of trainings attended (8 trainings and more) obtained a mean score of 3.62 as to "high level".

Specifically, as for the lower and higher groups they both have the highest mean score on item no. 2 which states "provide accurate information" with of a mean of 4.33 and 4.39 respectively both interpreted as interpreted as "High Level". While both groups have lowest mean score of 2.98 and 3.26 on item no. 7 which states "keep being creative" and is interpreted as "Moderate Level".

**Table 23 :** Level of Teachers' Research Competence in the Area of Ability to Communicate When Grouped According to Length of Service

Items	Shorter		Longer	
	Mean	Interpretation	Mean	Interpretation
1. simplify my language.	3.52	High Level	3.56	High Level
2. provide accurate information.	4.40	High Level	4.33	High Level
3. communicate ideas in a timely fashion.	3.28	Moderate Level	3.54	High Level
4. share important information.	4.02	High Level	3.61	High Level
5. collaborate with others.	3.67	High Level	3.81	High Level
6. listen carefully to the suggestions of others.	3.60	High Level	3.29	Moderate Level
7. keep being creative.	3.08	Moderate Level	3.18	Moderate Level
8. present my research in various ways.	3.48	Moderate Level	3.23	Moderate Level
<b>Overall Mean</b>	<b>3.63</b>	<b>High Level</b>	<b>3.57</b>	<b>High Level</b>

As shown in Table 23, the level of teachers' research competence in the area of the ability to communicate when grouped according to the length of service. Generally, the overall mean of the study, when respondents were grouped as shorter length of service (less than 10 years) obtained, is 3.63 as to "high level" while respondents who belong to higher length of service (more than 10 years) obtained a mean score of 3.57 as to "high level". Specifically, as for shorter length of service (10 years and below), the indicator with the highest mean score of 4.20 is item no. 2 which states "provide accurate information" and is interpreted as "High Level". While the indicator with the lowest mean score of 3.08 is item no. 7 which states "keep being creative" and is interpreted as "Moderate Level". As for longer length of service (10 years and below) the indicator that got the highest mean score of 4.33 is item no. 2 which states "provide accurate information" and is interpreted as high level. While the indicator that got the lowest mean score of 3.18 is item no. 7 which states "keep being creative" and is interpreted as "moderate level".

**Table 24 :** Level of Teachers' Research Competence in the Area of Technological Capability When Grouped According to Highest Educational Attainment

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
word processing skills.	3.48	Moderate Level	3.41	Moderate Level
E-mail management skills.	3.94	High Level	3.98	High Level
electronic presentation skills	3.97	High Level	4.38	High Level
video conferencing skills.	3.56	High Level	3.53	High Level
educational copyright knowledge.	2.93	Moderate Level	2.68	Moderate Level
computer-related storage devices (knowledge, disk, USB Drives, DVDs, Etc.).	3.84	High Level	3.9	High Level
knowledge in downloading software from the Web (knowledge including eBook).	3.42	Moderate Level	3.35	Moderate Level
database skills.	3.96	High Level	4.38	High Level
<b>Overall Mean</b>	<b>3.64</b>	<b>High Level</b>	<b>3.70</b>	<b>High Level</b>

As shown in Table 24, the level of teachers' research competence in the area of technological capability when grouped according to the educational attainment.

Generally, the overall mean of the study when respondents were grouped as lower educational attainment (bachelor’s degree) obtained is 3.64 as to “high level” while respondents who belong to higher educational attainment (master’s and doctorate degree) obtained a mean score of 3.70 as to “high level”. Specifically, as for lower educational attainment (bachelor’s degree), the indicator with the highest mean score of 3.97 is item no. 3 which states “electronic presentation skills” and is interpreted as “High Level”. While the indicator with the lowest mean score of 2.93 is item no. 5 which states “educational copyright knowledge” and is interpreted as “Moderate Level”. As for higher education attainment (masters and doctorate degree) the indicator that got the highest mean score of 4.38 is item no. 3 which states “electronic presentation skills” and item no. 9 which states “database skills” and is both interpreted as high level. While the indicator that got the lowest mean score of 2.68 is item no. 5 which states “educational copyright knowledge” and is interpreted as “moderate level”.

**Table 25 :** Level of Teachers’ Research Competence in the Area of Technological Capability When Grouped According to Number of Trainings Attended

Items	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
word processing skills.	3.37	Moderate Level	3.53	High Level
E-mail management skills.	3.93	High Level	3.98	High Level
electronic presentation skills	4.19	High Level	4.08	High Level
video conferencing skills.	3.5	High Level	3.60	High Level
educational copyright knowledge.	2.86	Moderate Level	2.81	Moderate Level
computer-related storage devices (knowledge, disk, USB Drives, DVDs, Etc.).	3.88	High Level	3.84	High Level
knowledge in downloading software from the Web (knowledge including eBook).	3.25	Moderate Level	3.51	High Level
database skills.	4.19	High Level	4.07	High Level
<b>Overall Mean</b>	3.64	High Level	3.68	High Level

Table 25 presents the level of teachers’ research competence in the area of technological capability when grouped according to number of trainings attended. Generally, the overall mean of the study when respondents were grouped as lower number of trainings attended (8 trainings and below) obtained is 3.64 as to “high level” while respondents who belong to higher number of trainings attended (8 trainings and above) obtained a mean score of 3.68 as to “high level”. Specifically, as for lower number of trainings attended (8 trainings and below), the indicator with the highest mean score of 4.19 is item no. 3 which states “electronic presentation skills” and item no. 9 which states “database skills” which are both interpreted as “High Level”. While the indicator with the lowest mean score of 2.86 is item no. 5 which states “educational copyright knowledge” and is interpreted as “Moderate Level”. As for higher number of trainings attended (8 trainings and above), the indicator that got the highest mean score of 4.08 is item no. 3 which states “electronic presentation skills” and is interpreted as high level. While the indicator that got the lowest mean score of 2.81 is item no. 5 which states “educational copyright knowledge” and is interpreted as “moderate level”.

**Table 26** Level of Teachers’ Research Competence in the Area Technological Capability When Grouped According to Length of Service

Items	Shorter		Longer	
	Mean	Interpretation	Mean	Interpretation
word processing skills.	3.55	High Level	3.37	Moderate Level
E-mail management skills.	3.98	High Level	3.93	High Level

electronic presentation skills	4.32	High Level	3.96	High Level
video conferencing skills.	3.55	High Level	3.55	High Level
educational copyright knowledge.	2.70	Moderate Level	2.96	Moderate Level
computer-related storage devices (knowledge, disk, USB Drives, DVDs, Etc.).	3.95	High Level	3.77	High Level
knowledge in downloading software from the Web (knowledge including eBook).	3.64	High Level	3.16	Moderate Level
database skills.	4.32	High Level	3.95	High Level
<b>Overall Mean</b>	3.75	High Level	3.58	High Level

Table 26 shows the level of teachers' research capability in the area of technological capability when grouped according to the length of service. Generally, the overall mean of the study when respondents were grouped as shorter length of service (10 years and below) obtained is 3.75 as to "high level" while respondents who belong to longer length of service (more than 10 years) obtained a mean score of 3.58 as to "high level". Specifically, as for shorter length of service (10 years and below), the indicator with the highest mean score of 4.32 is item no. 3 which states "electronic presentation skills" and item no. 9 which states "database skills" which are both interpreted as "High Level". While the indicator with the lowest mean score of 2.70 is item no. 5 which states "educational copyright knowledge" and is interpreted as "Moderate Level". As for longer length of service (more than 10 years), the indicator that got the highest mean score of 3.96 is item no. 3 which states "electronic presentation skills" and is interpreted as high level. While the indicator that got the lowest mean score of 2.96 is item no. 5 which states "educational copyright knowledge" and is interpreted as "moderate level".

**Table 27 :** Level of Teachers' Work Performance When Grouped According to the Variables

Variables	Category	Mean	Interpretation
Highest Educational Attainment	Lower (Bachelor's Degree)	4.48	Very Satisfactory
	Higher (Master & Doctorate Degrees)	4.46	Very Satisfactory
Number of Trainings	Lower (less than 8 trainings)	4.43	Very Satisfactory
	Higher (8 trainings & more)	4.51	Outstanding
Length of Service	Shorter (less than 10 years)	4.52	Outstanding
	Longer (10 years & more)	4.43	Very Satisfactory
	Total	4.47	Very Satisfactory

Table 27 presents the performance of teachers in as evidenced from the Individual Performance Commitment and Review Form (IPCRF). Overall, the performance of teachers reflected as very satisfactory as shown in an average mean of 4.47. When grouped according to their educational attainment both lower (bachelors' degree) and higher (masters and doctorate degrees) obtained the very satisfactory rating in a mean of 4.48 and 4.46 respectively. When grouped as to the number of trainings, those teachers with less than 8 number of trainings obtained very satisfactory rating in a mean of 4.43 while those with more than 8 trainings were described as outstanding in an average mean of 4.51. As for the length of service, shorter

(less than 10 years) obtained an outstanding rating of 4.52 while the longer (10 years and more) obtained a very satisfactory rating of 4.43.

**Table 28 :** Difference in the Level of Teachers’ Research Perception in the Area of Time When Grouped and Compared According to the Aforementioned Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Educational Attainment	Lower (Bachelor's Degree)	95	74.35	2503.000	-1.279	.201	Not Significant
	Higher (Master & Doctorate Degrees)	60	83.78				
Number of Trainings	Lower (less than 8 trainings)	72	88.03	2265.500	-2.600	.009	Significant
	Higher (8 trainings & more)	83	69.30				
Length of Service	Shorter (less than 10 years)	74	82.27	2681.000	-1.136	.256	Not Significant
	Longer (less than 10 years)	81	74.10				

Table 28 presents the difference in the level of teachers’ research perception in the area of time when grouped and compared according to the aforementioned variables of educational background, number of trainings and length of service. Educational attainment, revealed a p-value of -1.929 at .054 which is greater than 0.05 degree of confidence. Hence, the hypothesis that states that there is no significant difference in the level of teachers’ research perception of time when grouped according to the educational attainment was accepted. As for the number of trainings, it resulted to a p-value of -1.225 at .221 which is greater than 0.05 degree of confidence. Hence, the hypothesis that states that there is no significant difference in the level of teachers’ research perception of time when grouped according to the number of trainings was rejected. There is a significant difference in the level of teachers’ research perception when grouped according to the number of trainings they had attended. The more trainings they had attended As for the length of service, it resulted to 6082.000 and it has a p-value of -.848 at .397 which is greater than 0.05 degree of confidence. Hence, the hypothesis that states that there is no significant difference in the level of teachers’ research perception with time when grouped according to the length of service was accepted.

**Table 29 :** Difference in the Level of Teachers’ Research Perception in the Area of Cost When Grouped and Compared According to the Aforementioned Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Educational Attainment	Lower (Bachelor's)	95	72.49				

	Degree)			2326.500	-1.929	.054	Not Significant
	Higher (Master & Doctorate Degrees)	60	86.73				
Number of Trainings	Lower (less than 8 trainings)	72	82.73	2647.500	-1.225	.221	Not Significant
	Higher (8 trainings & more)	83	73.90				
Length of Service	Shorter (less than 10 years)	74	81.19	6082.000	-.848	.397	Not Significant
	Longer (less than 10 years)	81	75.09				

Table 29 presents the difference in the level of teachers' research perception in the area of cost when grouped and compared according to the aforementioned variables of educational background, number of trainings and length of service. As shown, for the educational attainment, it revealed a p-value of -1.929 at .054, while for the number of trainings it revealed a p-value of -1.225 at .221 and for the length of service, it has a p-value of -.848 at .397 which is greater than 0.05 degree of confidence. Hence, the hypothesis that states that there is no significant difference in the level of teachers' research perception with cost when grouped according to the educational attainment, number of training and length of service was accepted.

**Table 30 :** Difference in the Level of Teachers' Research Perception in the Area of Knowledge When Grouped and Compared According to the Aforementioned Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Educational Attainment	Lower (Bachelor's Degree)	95	74.12	2481.000	7041.000	-1.360	Not Significant
	Higher (Master & Doctorate Degrees)	60	84.15				
Number of Trainings	Lower (less than 8 trainings)	72	81.93	2705.000	-1.019	.308	Not Significant
	Higher (8 trainings & more)	83	74.59				
Length of Service	Shorter (less than 10 years)	74	80.45	6136.5000	-.653	.514	Not Significant
	Longer (less than 10 years)	81	75.76				

Table 30 presents the difference in the level of teachers’ research perception in the area of knowledge when grouped and compared according to the aforementioned variables of educational background, number of trainings and length of service. As shown, educational attainment, revealed a p-value of 7041.000 at -1.360 whereas, the number of trainings revealed a p-value of -1.019 at .308 and length of service results to a p-value of -.653 at .514 which are all greater than 0.05 degree of confidence. Hence, hypothesis that states that there is no significant difference in the level of teachers’ research perception in the area of knowledge when grouped according to the educational attainment, number of training and length of service was accepted.

**Table 31 :** Difference in the Level of Teachers’ Research Competence in the Area of Ability to Work Under Pressure when Grouped and Compared According to the Aforementioned Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Educational Attainment	Lower (Bachelor's Degree)	95	79.73	2770.000	-.785	.432	Not Significant
	Higher (Master & Doctorate Degrees)	60	75.27				
Number of Trainings	Lower (less than 8 trainings)	72	74.97	2770.000	-.785	.432	Not Significant
	Higher (8 trainings & more)	83	80.63				
Length of Service	Shorter (less than 10 years)	74	80.65	2801.000	-.705	.481	Not Significant
	Longer (less than 10 years)	81	75.58				

Table 31 presents the difference in the level of teachers’ research competence in the area of ability to work under pressure when grouped and compared according to the aforementioned variables when grouped according to educational background, number of trainings and length of service.

As shown, for the educational attainment, it revealed a p-value of -.785 at .432 while the number of trainings resulted to a p-value of -.785 at .432 and the length of service, has a p-value of -.705 at .481 which is greater than 0.05 degree of confidence. Hence, the hypothesis that states that there is no significant difference in the level of teachers’ research competence in the ability to work under pressure when grouped and compared according to the aforementioned variables of educational attainment, number of trainings and length of service was accepted.

**Table 32 :** Difference in the Level of Teachers’ Research Competence in the Area of Ability to Communicate When Grouped and Compared According to the Aforementioned Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Educational Attainment	Lower (Bachelor's	95	75.41				

	Degree)			2604.000	-.907	.364	Not Significant
	Higher (Master & Doctorate Degrees)	60	82.10				
Number of Trainings	Lower (less than 8 trainings)	72	73.10	2635.000	-1.271	.204	Not Significant
	Higher (8 trainings & more)	83	82.25				
Length of Service	Shorter (less than 10 years)	74	76.02	2850.500	-.527	.598	Not Significant
	Longer (less than 10 years)	81	79.81				

Table 32 presents the difference in the level of teachers' research competence in the area of ability to communicate when grouped and compared according to the aforementioned variables of educational background, number of trainings and length of service. As shown, for the educational attainment, it has revealed a p-value of -.907 at .364, whereas the number of trainings, revealed a p-value of -1.271 at .204 and the length of service, with a p-value of -.527 at .598 which is greater than 0.05 degree of confidence. Hence, the hypothesis that states that there is no significant difference in the level of teachers' research competence in the ability to communicate when grouped and compared according to the aforementioned variables of educational attainment, number of trainings and length of service was accepted.

**Table 33.** : *Difference in the Level of Teachers' Research Competence in the Area of Technological Capability When Grouped and Compared According to the Aforementioned Variables*

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Educational Attainment	Lower (Bachelor's Degree)	95	75.19	2583.000	-.986	.324	Not Significant
	Higher (Master & Doctorate Degrees)	60	82.45				
Number of Trainings	Lower (less than 8 trainings)	72	75.37	2798.500	-.683	.494	Not Significant
	Higher (8 trainings & more)	83	80.28				
Length of Service	Shorter (less than 10 years)	74	82.74	2646.000	-1.264	.206	Not Significant

	Longer (less than 10 years)	81	73.67				
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Table 33 presents the difference in the level of teachers' research competence in the area of technological capability when grouped and compared according to the aforementioned variables of educational background, number of trainings and length of service. Educational attainment, revealed a p-value of -.986 at .324, the number of trainings resulted to a p-value of -.683 at and the length of service with a p-value of -1.264 at .206 which is greater than 0.05 degree of confidence. Hence, the hypothesis that states that there is no significant difference in the level of teachers' research competence in technological ability when grouped and compared according to the aforementioned variables of educational attainment, number of trainings and length of service was accepted.

**Table 34 :** Difference in the Level of Teachers' Work Performance When Grouped and Compared According to the Aforementioned Variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Educational Attainment	Lower (Bachelor's Degree)	95	84.12	2269.000	-2.136	.033	Significant
	Higher (Master & Doctorate Degrees)	60	68.32				
Number of Trainings	Lower (less than 8 trainings)	72	70.93	2479.000	-1.828	.068	Not Significant
	Higher (8 trainings & more)	83	84.13				
Length of Service	Shorter (less than 10 years)	74	86.89	2339.500	-2.357	.018	Significant
	Longer (less than 10 years)	81	69.88				

Table 34 presents the difference in the level of teachers' work performance when grouped and compared according to the aforementioned variables of educational attainment, number of trainings and length of service. The findings revealed that work performance of teachers in the area of educational attainment is with the p- value of -2.136 at .033 such is lesser than 0.05 level of the test. Therefore, the hypothesis that states that there is no significant difference in the level of teachers' work performance when grouped and compared according to educational attainment was rejected. There is a significant difference in the level of teachers' work performance when grouped and compared according to educational attainment. On the other hand, when grouped as to the number of trainings, the findings revealed a p- value of -1.828 at .068 such is greater than 0.05 level of the test. Therefore, the hypothesis was accepted. There is no significant difference in the level of teachers' work performance when grouped and compared according to their number of trainings. Moreover, when grouped to the length of service, the findings revealed a p- value of -2.357 at .018 such is greater than 0.05 level of the test. Therefore, the hypothesis was rejected. There is a significant difference in the level of teachers' work performance when grouped and compared according to length of service.

## Summary of Findings:

The researcher has come up with the following findings based on the gathered, presented, and analyzed data. The profile of the 155 elementary teachers showed that the majority of the respondents belonged to the lower group, which had attained bachelor's degrees. In terms of the number of trainings, majority of them belong to the higher group which have had attended Eight (8) trainings and above. And in terms of length of service, the majority of the teachers belong to the longer group, which has served Ten (10) trainings and above in the teaching profession.

The level of research perception in the area of time is at a moderate level, while in the area of Cost and knowledge is high level. The level of research competence in three areas, such as the ability to work under pressure, ability to communicate, and technology capability, was at a high level. In terms of research perception in the area of time, cost, and knowledge, it showed that the area of time, when grouped according to highest educational attainment, both lower (bachelor's degree) and higher groups (masters and doctorate degree), got "moderate level." While in terms of the number of training's attended, the lower group (Eight (8) training and below) got "high level," and the higher group (Ten (10) training and above) got "moderate level." In terms of length of service, the shorter group (Ten (10) years and below) got "high level," and the longer group (Ten (10) years and above) got "moderate level." Moreover, while in cost, highest educational attainment, both got "high level" in lower (bachelor's degree) and higher (master's and doctorate degree) group. While in terms of the number of training's attended, both lower (eight (8) training and below) and higher (8 pieces of training and above) got "high level" and length of service, both shorter (Ten (10) years and below) and longer (Ten (10) years and above) got "high level." While in the area of knowledge, when grouped according to highest educational attainment, the lower group (bachelor's degree) got "moderate level," and the higher group (masters and doctorate degree) got "high level." In terms of the number of training's attended, the lower group (Eight (8) training and below) got "high level," and the higher group (Eight (8) training and above) got "moderate level." And in terms of the length of service, the lower group (Ten (10) years and below) got "high level," and the higher group (Ten (10) years and above) got "moderate level." In terms of the level of teachers' research competence in the area of ability to work under pressure, ability to communicate, and technology capability. In terms of the area able to work under pressure, it was found that when grouped in terms of highest educational attainment, the lower group (bachelor's degree) and the higher group (masters and doctoral degree) both got a "high level." When grouped according to the number of training, both lower (Eight (8) training and below) and higher (Eight (8) training and above) got "high level." When grouped in terms of length of service, shorter (Ten (10) years and below) and longer (Ten (10) years and above) both also got a "high level." Moreover, in terms of the area of ability to communicate, when grouped according to highest educational attainment, both lower (bachelor's degree) and higher (master and doctoral degree) got a "high level." In a number of training attended, both lower (Eight (8) training and below) and higher (Eight (8) training and above) got a "high level." Furthermore, in terms of length of service, both lower (Ten (10) years and below) and higher (Ten (10) years and above) also got a "high level." Furthermore, in terms of technical capability, when grouped as highest educational attainment, both lower (bachelor's degree) and higher (master and doctoral degree) got "High Level." When grouped according to the number of training attended, both lower (8 pieces of training and below) and higher (8 pieces of training and above) got a "high level." When grouped in terms of length of service, both lower (Ten (10) years and below) and higher (Ten (10) years and above) also got a "high level." The level of teacher's work performance based on IPCRF, when grouped according to highest educational attainment, number of training attended, and length of service, got "Very Satisfactory." No significant differences existed in the level of teachers' action research perception in the area of cost and knowledge when grouped to the variables highest educational attainment, number of training attended, and length of service. While there was a significant difference in the level of teachers' research perception in the area of time when grouped to number of trainings attended and no significant difference when grouped to educational attainment and length of service.

No significant differences existed in the level of action research competence of District Murcia II teachers when each area is grouped to the variables highest educational attainment, number of training attended, and length of service. There are significant differences existed in the level of work performance of District Murcia II teachers when each area was grouped to the variables highest educational attainment, number of trainings attended, and length of service. Specifically, the number of trainings attended got "Not Significant," and both Educational Attainment and length of service attained a rating of "significant."

No significant relationship existed between the level of research perception of District Murcia II teachers and their work performance. A significant relationship exists between the level of research competence of District Murcia II teachers and their work performance.

## **Conclusions**

Based on the findings enumerated in this chapter, the researcher has come up with the following conclusions:

Elementary teachers that are bachelor's degree holders are more efficient action research writers rather than master's and doctorate degree holder because most of bachelor's degree holders have plenty of time in writing and conducting action research. They can write, conduct, and perform action research effectively because they are not that busy. Moreover, teachers who have attained eight (8) and above trainings had honed their action research writing skills through those seminars and furthermore, teachers who served ten (10) years and above service had acquired the skills in writing action research because they are required to conduct at least 1 action research per year in which they had immediately mastered. Teachers had gained a high level at the area of Cost and Knowledge where it showed that teachers can provide the financial demands, expertise and understanding in action research on the other hand, most of them find difficulty in finishing action research on time due to a hectic schedule at school. Elementary teachers are proficient in writing action research. The study confirmed that they can work under pressure, communicate accurately and are technologically literate people. The results showed that teachers can competently produce action research outputs regardless of how challenging and difficult it is for the teacher since it is an additional workload. Elementary teachers in the area of time with high and low educational attainment, higher number of training and longer length of service perceived action research as a moderately difficult task due to lack of working time. Teachers have a lot of responsibilities which need more focus and commitment. While teachers with low educational attainment, Higher number of trainings and higher length of service in the area of knowledge perceived action research as a moderately difficult task as teachers cannot easily identify the research design to be used and perform actual experimentation. On the other hand, teachers who have higher number of trainings attended and had served Department of Education in not more than 10 years perceived action research as an easy-going task as they had already mastered the steps in writing action research which results to fast completion of the said task. Moreover, teachers in the area of cost perceived action research as not a financial burden and they can somewhat finance and provide for all the needs in action research writing. Furthermore, teachers who've enrolled in graduate studies, had attended few trainings and shorter length of service show great knowledge in action research. Elementary teachers can work under pressure, can communicate well and are technologically capable as shown in the results which confirms that teachers are knowledgeable, skilled, and capable of writing action research regardless of the numerous hindrances experienced. They can make good, creative, and comprehensive action research that can help and improve the performance of students. Elementary teachers had accomplished needed tasks with exceeded expectations with all the required goals and objectives of teachers which made them execute a very satisfactory work performance. Elementary teachers perceived action research writing as an easy job in terms of cost and knowledge as it has shown no significant difference in the three main areas wherein teachers could provide for funds needed and are skilled and knowledgeable in terms of action research writing. However, teachers had a little difficulty in terms of finishing action research on time as it had shown a significant difference because teachers tend to neglect it due to a busy schedule at school.

Elementary teachers are competent in writing action research as it has shown no significant difference in the three main areas when grouped to variables. This goes to show that teachers in Murcia II have adept skills and knowledge needed in action research writing. Thus, the areas do not affect and influence the teachers' research competence and are all capable and competent regardless of their qualifications. It is determined that teachers work performance can be influenced by their educational attainment and number of years in service which goes to show that teachers performance depends on their acquired schooling and the number of years they have rendered in service. However, regardless of how many trainings a teacher had attended it still doesn't affect how they perform in school because these are additional knowledge provided for teachers which could enhance their skills. Elementary teachers' perception of action research writing couldn't affect how they perform in school. Moreover, teachers' skills in action research does not change whether how good or bad a teacher perceives action research. Elementary teachers' skills in action research writing influenced how they could perform their work in school. This shows that competent action research writers

could perform well as they could provide innovations and solutions to classroom problems that could improve pupils' performance. Once pupils can perform well it could be reflected in how effective and capable the teacher is in their profession.

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