

“Effectiveness of Research Methodology Training Programme as perceived by the Social Science Scholars”: An Empirical Study

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Abstract: The present study has been undertaken with twin objectives of (i) To study the theoretical knowledge gained by the research scholars towards research methodology in the topics namely of Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software, and Overall Knowledge gained on Research Methodology, during the training programme (ii) To find out the knowledge gained in relation to the application of Qualitative and Quantitative software in their research. A single group pre and post test research design (Emma Marsden and Carole J.Torgerson 2012) is adopted for the present study and 29 trainees are selected. (Research scholars M.Phil and Ph.D).At the entry level, a structured questionnaire is distributed to the trainees to know their current knowledge level (pre test) on research methodology and at the fag-end of the training programme, the same questionnaire has been distributed to the same set of participants to assess their knowledge on research methodology (post test), after attending the training programme. A comparative analysis had been carried out between the pre and the post test scores. The major findings of the study reveal that there is a significant difference between the pre and the post test scores with regard to various topics related to research methodology, as perceived by the research scholars in the dimensions of Knowledge gained on Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software and Overall Knowledge gained through the training programme. Further, the mean scores reveal that the training programme on various topics related to research methodology have created a definite impact on the trainees.

Keywords: Pre test, Post test, Empirical.

I. Introduction

Research is crucial and becomes an integral part in imparting education towards transformation and development. There is a need in developing and engaging result-based curriculum, demonstrating student success and more. Research is important because it gives direction to deal with a specific problem. A researchable area in any academic discipline is an area that has an ample scope to be explored. The purpose of research is to inform action. Thus, research scholars are expected to contextualize their findings within the larger body of research. The purpose of the training programme is to impart quality education with effectiveness in the field of research whereby enabling research scholars in Social Sciences (Social Work, Commerce and Management disciplines) to have an holistic understanding pertaining to new trends in the field of research inculcating both qualitative & quantitative methods in creating a better tomorrow today.

Background of the Study

The study conducted during the training programme which had a spread over of 56 intensive sessions comprising of both theory and practice. The training was administered to provide each research scholar individual focus and detailed attention. Training sessions included vivid interactions on the recent trends in research and also research scholars to use advanced Qualitative & Quantitative softwares in computing advanced statistical and qualitative tests. The training was administered to M.Phil and Ph.D Scholars whereby they could put theory into practice in their research. This comprised of 29 research scholars from the disciplines of Commerce, Management and Social Work. Various experts in the field of Research were involved in this vigorous and intensive training programme to impart high level of integrity, knowledge, skill and practical composure in the field of research.

Significance of the study

These day, the research studies these days are gaining an unprecedented focus and attention. A researchable area in any academic discipline is an area that has an ample scope to be explored. If the scope in itself poses some potential problems that need to be answered, a research methodology offers solutions for

dealing with them effectively. The very path one traverses in search of authentic solutions to a specific problem constitutes what we call ‘research’. This research question posed by the researcher and the methodology that he/she adopts to get solutions is the most valuable part of the research work. Research is important because it gives direction to deal with a specific problem. The problem, whether it is thoroughly solved or not, it is not the forte of the research work. Research has now become mandatory in postgraduate disciplines in all reputed colleges and universities all over India. Research Studies these days are gaining an unprecedented focus and attention. Hence, the present study is one such attempt to study impact of the training programme scientifically as perceived by the research scholars (M.phil/Ph.D).

Aim

The main aim of this study was to find out the Effectiveness of Research Methodology Training Programme as perceived by the Social Science Scholars with special reference to Social Work, Commerce and Management.

Objectives of the study

- ❖ To study the theoretical knowledge gained by the research scholars towards research methodology in the topics namely of Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software, and Overall Knowledge gained on Research Methodology, during the training programme
- ❖ To find out the knowledge gained in relation to the application of Qualitative and Qualitative software in their research.

Research Design

In this study the researcher attempted A single group pre and post test research design (Emma Marsden and Carole J. Torgerson 2012).

Universe

The universe of the present study comprises of all the M.Phil and Ph.D Research Scholars from Social Work, and Commerce and Management Studies disciplines who have attended the Training Programme on “Recent Trends in Research : An Interdisciplinary Approach” from 31st October to 15th November 2016.

Tools of Data Collection

A structured questionnaire comprising of 11 dimensions namely Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software, and Overall Knowledge gained on Research Methodology, was developed by the author using Likert type scale. The content validity was established by the experts and the Alpha Cronbach reliability of the tool is found to be 0.898.

Data Collection Process

A structured questionnaire was distributed to the trainees to know their current knowledge (pre test) on research methodology and at the fag-end of the training programme, the same questionnaire was distributed to the same set of participants to assess their knowledge on research methodology (post test), after attending the training programme. The data was systematically processed and analysed to draw meaningful inferences.

Table: 1 Socio –Demographic Characteristics

Sl.No.	Variable	No. of Respondents (n:29)	Percentage
1	Age		
	21-30	23	79.3
	31-40	5	17.2
	41-50	1	3.5
2.	Domicile		
	Urban	19	65.5
	Rural	10	34.5
3.	Department		
	Social Work	4	13.8
	Management Studies	11	37.9
	Commerce	14	48.3
4.	Educational Qualification		
	M.Phil	26	89.7
	Ph.D	3	10.3

From the above table, it is revealed that vast majority of the respondents (79.3%) were in the age group of 21 to 30 years. The majority (65.5%) of the respondents were urban background. Less than half of the respondents (48.3%) were belonging to the department of commerce. The vast majority of the respondents (89.7%) were having M.Phil as their educational qualification.

Table: 2 Student’s t- test between Pre and Post test scores with regard to various topics pertaining Research Methodology Training Programme.

Sl.No	Scores	Mean	S.D	Statistical Inference
1.	Selection of the Research Topic Pre test n:29 Post test n:29	2.571 4.035	0.741 0.838	t =6.923 df-56 P < 0.01 Significant
2.	Review of Literature Pre test n:29 Post test n:29	2.357 3.857	0.621 0.848	t=7.548 df-56 P < 0.01 Significant
3.	Hypotheses Pre test n:29 Post test n:29	2.178 3.785	0.669 0.738	t=8.532 df-56 P < 0.01 Significant
4.	Research Design Pre test n:29 Post test n:29	2.321 3.892	0.669 0.737	t=8.324 df-56 P < 0.01 Significant
5.	Sampling Pre test n:29 Post test n:29	2.571 3.928	0.634 0.813	t=6.964 df-56 P < 0.01 Significant
6.	Tools of Data Collection Pre test n:29 Post test n:29	2.500 3.821	0.693 0.818	t=6.514 df-56 P < 0.01 Significant
7.	Qualitative Techniques Pre test n:29 Post test n:29	2.178 3.678	0.772 0.818	t=7.051 df-56 P < 0.01 Significant
8.	Report Writing Pre test n:29 Post test n:29	2.250 3.821	0.645 0.722	t=8.580 df-56 P < 0.01 Significant
9.	Reference / Bibliography Pre test n:29 Post test n:29	2.392 3.857	0.828 0.650	t=8.563 df-56 P < 0.01 Significant
10.	Qualitative Software Pre test n:29 Post test n:29	2.357 4.000	0.678 0.720	t=8.787 df-56 P < 0.01 Significant

11.	Quantitative Software Pre test n:29 Post test n:29	1.857 3.821	0.755 0.772	t=9.618 df-56 P < 0.01 Significant
12.	Overall Pre test n:29 Post test n:29	2.535 3.928	0.576 0.144	t=7.687 df-56 P < 0.01 Significant

There is a significant difference between the pre and post test scores with regard to various topics related to research methodology, as perceived by the research scholars in the dimensions of Knowledge gained on Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software and Overall Knowledge gained through the training programme. Further, the mean scores reveal that post test scores were higher than the pre test scores in all the dimensions of the research methodology which clearly indicates that the training programme has created a definite positive impact on the research scholars.

Table: 3 Comparative Analysis of Pre test and Post test Scores of various topics pertaining of Research Methodology course as perceived by the Research Scholars

S.No	Topics	Post Test Mean	Pre Test Mean	Difference	Impact (%)
1.	Selection of the Research Topic	4.035	2.571	1.464	29
2.	Review of Literature	3.857	2.357	1.500	30
3.	Hypotheses	3.785	2.178	1.607	32
4.	Research Design	3.892	2.321	1.571	31
5.	Sampling	3.928	2.571	1.357	27
6.	Tools of Data Collection	3.821	2.500	1.321	26
7.	Qualitative Techniques	3.678	2.392	1.500	30
8.	Report Writing	3.821	2.250	1.571	31
9.	Reference / Bibliography	3.857	2.392	1.465	29
10.	Qualitative Software	4.000	2.357	1.643	33
11.	Quantitative Software	3.821	1.857	1.964	39
12.	Overall	3.928	2.535	1.393	28

From the table it is inferred that the training programme has enhanced nearly 30 percent the knowledge of the research scholars in all the topics related to Research Methodology in the dimensions of Knowledge gained on Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data Collection, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software and Overall Knowledge gained before and after attending the training programme.

Table: 4 Comparative Analysis of Pre test and Post test Scores of various dimensions of Research Methodology course as perceived by the Social Work Scholars

S.No	Topics	Post Test Mean	Pre Test Mean	Difference	Impact (%)
1.	Selection of the Research Topic	4.2500	2.2500	2.00	40
2.	Review of Literature	4.0000	2.2500	1.75	35
3.	Hypotheses	4.0000	1.7500	2.25	45
4.	Research Design	3.7500	1.7500	2.00	40
5.	Sampling	3.5000	2.0000	2.00	40
6.	Tools of Data Collection	3.7500	1.7500	2.00	40
7.	Qualitative Techniques	3.7500	1.7500	2.00	40
8.	Report Writing	3.7500	2.0000	1.75	35
9.	Reference / Bibliography	4.2500	1.7500	2.50	50
10.	Qualitative Software	4.50000	2.00000	2.50	50
11.	Quantitative Software	4.2500	1.2500	3.00	60
12.	Overall	4.0000	2.0000	2.00	40

From the table it is evident that the training programme has enhanced an average of 43 percent the knowledge of the research scholars in all the topics related to Research Methodology in the dimensions of Knowledge gained on Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data Collection, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software and Overall Knowledge gained before and after attending the training programme as perceived by the Social Work scholars.

Table: 5 Comparative Analysis of Pre test and Post test Scores of various dimensions of Research Methodology course as perceived by the Commerce Scholars

S.No	Topics	Post Test Mean	Pre Test Mean	Difference	Impact (%)
1.	Selection of the Research Topic	4.0714	2.7143	1.35	27
2.	Review of Literature	3.9286	2.3571	1.57	31
3.	Hypotheses	3.9286	2.3571	1.57	31
4.	Research Design	4.1429	2.5000	1.64	33
5.	Sampling	4.0714	2.7143	1.35	27
6.	Tools of Data Collection	3.9286	2.6429	1.28	25
7.	Qualitative Techniques	3.9286	2.5714	1.35	27
8.	Report Writing	4.1429	2.4286	1.71	34
9.	Reference / Bibliography	4.0714	2.6429	1.42	29
10.	Qualitative Software	4.0000	2.5000	1.50	30
11.	Quantitative Software	4.0000	2.2857	1.71	34
12.	Overall	4.1429	2.7143	1.42	29

From the table it is understood that the training programme has enhanced an average of 30 percent the knowledge of the research scholars in all the topics related to Research Methodology in the dimensions of Knowledge gained on Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data Collection, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software and Overall Knowledge gained before and after attending the training programme as perceived by the Commerce research scholars.

Table: 6 Comparative Analysis of Pre test and Post test Scores of various dimensions of Research Methodology course as perceived by the Management Studies Scholars

S.No	Topics	Post Test Mean	Pre Test Mean	Difference	Impact (%)
1.	Selection of the Research Topic	3.9091	2.4545	1.45	29
2.	Review of Literature	3.6364	2.3636	1.27	25
3.	Hypotheses	3.4545	2.0000	1.45	29
4.	Research Design	3.6364	2.2727	1.36	27
5.	Sampling	4.0000	2.5455	1.45	29
6.	Tools of Data Collection	3.8182	2.5455	1.27	25
7.	Qualitative Techniques	3.3636	1.7273	1.63	32
8.	Report Writing	3.3636	2.0000	1.36	27
10.	Qualitative Software	3.8182	2.2727	1.54	31
11.	Quantitative Software	3.3636	1.4545	1.90	38
12.	Overall	3.6364	2.4545	1.18	24

From the table it is found that the training programme has enhanced an average of 28 percent the knowledge of the research scholars in all the topics related to Research Methodology in the dimensions of Knowledge gained on Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data Collection, Qualitative Techniques, Report Writing, References and Bibliography, Quantitative software, Qualitative Software and Overall Knowledge gained before and after attending the training programme as perceived by the Management Studies scholars.

Salient findings

- ❖ Majority of the respondents (79.3%) were in the age group of 21to30 years.
- ❖ Majority of the respondents (65.5%) were from urban background.
- ❖ Majority of the respondents (48.3%) were belonging to the department of commerce.
- ❖ Majority of the respondents (89.7%) were pursuing of M.Phil degree.
- ❖ There is a significant difference between Pre and Post test scores of Research Methodology training programme in the topics namely Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data Collection, Qualitative Techniques, Report Writing, References , Bibliography and Quantitative and Qualitative softwares. Since, the Post test mean scores are found to be higher than the Pre test scores it is concluded that the training programme on the Research Methodology has a definite and positive influence in terms of the knowledge gained.
- ❖ The influence of pre and Post test on Research Methodology as perceived by the research scholars was found to be nearly 30 percent.

II. Conclusion

The Present study revealed that the training programme on Research Methodology in the topics namely Selection of the Research topic, Review of literature, Hypotheses, Research Design, Sampling, Tools of data Collection, Qualitative Techniques, Report Writing, References , Bibliography , Quantitative, and Qualitative

softwares has created a definite influence on the Research scholars belong to Social Work, Commerce, and Management Studies disciplines in terms of gaining both theoretical and practical knowledge on Quantitative and Qualitative softwares.

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