



Qualitative Analysis of Research Hypotheses Reported in Dissertations at Master of Education Level in Himachal Pradesh, India

DEVENDER KUMAR

Assistant Professor,

Department of Education, MLSM College
Sundernagar, District Mandi, Himachal Pradesh, India

Abstract:

The M.Ed. curriculum in India generally includes six to seven theory papers and writing a dissertation. Investigator was of the opinion that this is a level where students are trained in intricacies of research in education. The main objective of investigation was 'qualitative analysis of hypotheses framed in dissertations submitted by M.Ed. students of Teacher Training Colleges of Himachal Pradesh, in India.' A total 246 dissertations were selected nine institutions running M.Ed. and were analysed through Content analysis method. The data were collected through hypothesis rating scale. It was found that the research hypothesis in a dissertation was given a very casual attention. It was concluded that in all colleges all the parameters/criteria of framing research hypothesis in all dissertations were not treated satisfactorily.

Keywords: *Quality criteria/parameters, M.Ed. Level dissertation, Teacher Training institutions, qualitative analysis, Research Dissertation*

1. Conceptual Framework

'Master of Education' is a postgraduate degree in Education awarded by Universities in a large number of countries by different names. It is supposed to develop a global and a national vision for education in the modern scenario. M.Ed. is the abbreviation used for Master of Education programme. M.Ed. may be a general degree programme meant for current teachers who want to improve their instructional practices through reflection and focus on individualized goals or a specialized programme such as, M.Ed. in Educational Technology, M.Ed. in Guidance and Counselling, M.Ed. in Exceptional Youth and Children etc.

In India, Master of Education was a one year course earlier which is now transformed to a two year generally done after Bachelor of Education (B.Ed.) degree which is also a two year teacher-training programme now after graduation i.e. Bachelor of Science (B.Sc.), Bachelor of Arts (B.A.) or Bachelor of Commerce (B.Com) etc. The M.Ed. curriculum generally includes six to seven theory papers and writing a dissertation. Dissertation refers to the report of research done in M.Ed. which is submitted by a student in partial fulfillment of the requirements for the degree of Master of Education. Dissertation is compulsory for students pursuing M.Ed. through regular mode.

The purpose of including a dissertation in M.Ed. curriculum is to train the student into the intricacies of research process so as to enable him/her to understand different issues confronting education and facilitating the student to find solutions using scientific approach in his/her future academic and professional career. However, this is not a secret that a dissertation in majority of the cases is treated very casually by all -- the teachers, the students and the institutions -- right from selecting the topic to its evaluation.

We know that certain questions arise in our mind when we start thinking on a particular line. Basically new ideas are generated from the questions and curiosity about certain things or phenomenon and we start thinking whether the issue is researchable or not i.e. feasibility w.r.t. our own terms and conditions. The questions when stated in particular and directive terms gives us general way to proceed further and help us to frame good hypothesis. In this regard;

Black (2002) says “research questions are very important in a research problem because the problem with research questions that tend to be too weak is they do not provide sufficient direction for the research. The poorly stated research questions are Oftenly followed by research without direction producing results that are inconclusive or projects that generate vast amount of data followed by attempts to make some sense of it.” Further, the author discussed that a good Research question consists of following:

- It Expresses relationship between variables
- It should be stated in unambiguous terms in question form and
- It should employ the possibility of empirical testing.

A well-defined question further induces our mind to think about probable causes and solutions to it. And again one of the most important step in educational research i.e. hypothesis construction begins.

In this regard, **Moris and Travers (1969)** states that hypotheses are tentative answers to research problems. They are expressed in the form of relation between independent and dependent variables. Hypotheses are tentative conjectures because of their veracity and can be evaluated only after they have been tested empirically. When researchers test a hypothesis, he or she has no assurance that it will be verified.

Hypothesis can be derived deductively from theory, directly from observations, intuitively or from a combination of all of these. Research hypothesis share four common characteristics. They are clear, value free, Specific, and capable to empirical testing with the available research methods.

Nachmias and Nachmias (1964) also have suggested certain important characteristics of hypothesis i.e.

1. **Hypothesis must be clear** i.e., clarity is achieved by means of conceptual and operational definitions, the professional literature, and experts’ opinions also.
2. **Scientific hypothesis is value free** which means in principle the researchers’ value biases and subjective preferences have no place within the scientific approach.
3. **Hypotheses are specific** as investigator has to explicate the expected relations among the variables in terms of direction that is positive or negative and the conditions under which these relations will hold. Here theory becomes especially important in generating researchable and fruitful hypothesis.
4. **Hypothesis are testable** with available methods that evaluation of hypothesis depends on the existence of methods for testing them indeed, progress in science is closely related to the development of new research methods of observation, data collection, data analysis and generalization
5. **Hypothesis can be derived from theories** directly from observation, intuitively or from a combination of these. Probably the greatest source of hypothesis is professional literature; a critical review of the professional literature would familiarize the researcher with associated knowledge with problem and hypothesis that other studied, with concepts, theories, major variables, conceptual and operational definitions, and with the research methods used.

In judging a hypothesis **George J. Mouly (1964)** discusses his idea as under, he described that selection of problem can hardly be considered apart from hypothesis that might be tested in its solution. There is a parallel connection between the problem and the hypothesis. Some degree of data gathering such as the recall of past experiences and the review of literature, or a pilot study, must therefore precede the

development and gradual refinement of the hypothesis. He has also enlisted criteria for judging hypotheses as under:

1. A good hypothesis must be based directly on existing data it might even be expected to predict or anticipate previously unknown data.
2. A good hypothesis must explain existing data in simple terms than any other competing hypothesis that is the law of parsimony favours the hypothesis that explain the most in the simplest terms.
3. A good hypothesis must be stated as simply and concisely as the complexity of the concept involved will allow.
4. A good hypothesis must, above all, be testable it must be stated so that its implications can be reduced in the form of empirical or operational reference with respect to which the relationship can either be validated or refuted.

In this regard **Moris and Travers (1969)** stated certain important characteristics of hypothesis as:

1. hypothesis should be clearly and precisely stated they usually avoid the use of common expressions such a good teaching, personality, favourable climate, and other in common vocabulary of education. It should write for example “personality as measured by the Minnesota multiphasic personality inventory”.
2. hypothesis should be testable. Selection of a hypothesis that really should be testable. One should have good methods to test a particular hypothesis well in the beginning while framing a hypothesis.
3. hypothesis should state relationships between variables i.e. a well-developed hypothesis should meet satisfactory standards. It should state expected relationship between the variables of the study.
4. hypothesis should be Limited in scope -the more mature research worker is likely to choose hypothesis that are never in scope and therefore more testable the students should seek hypothesis that are relatively simple to test and yet a highly significant one.
5. hypothesis should be consistent with most known facts i.e. any hypothesis formulated must be consistent with a substantial body of established facts.
6. hypothesis should be stated as far as possible in simple terms.
7. hypothesis selected should be amenable to testing within a reasonable time.

We must acknowledge this fact that hypotheses in research are of utmost importance. One can describe whole research if hypotheses are clear and specific.

Present investigation revolves around the research hypotheses that give direction for investigator at each step of research. Framing good research hypotheses means half work done or the whole road map to investigate is ready. The investigator is of the opinion that research dissertation at Master of Education (M.Ed.) level is a platform where students are trained in intricacies of research in education which is base for further higher-level researches.

Hence, to begin with it was thought worthwhile to study one of main aspect in research in education i.e. Research hypotheses framed by researchers at Master of Education level with respect to certain criteria/parameters being designed by the author. This may help to understand how the students generally start with one of the most important aspect of the research process. In view of above discussion following major objective was framed.

2. Objective of the study

The objective of the present study is:

the qualitative analysis of Hypotheses framed in dissertations submitted by M.Ed. students of Teacher Training Colleges of Himachal Pradesh in respect of following:

- A. has the researcher formulated hypotheses for the study?
- B. has the researcher written all the possible hypotheses?
- C. conformity of hypotheses with objectives/research questions of the study?
- D. agreement of hypotheses with survey of related literature?

- E. has the researcher given the rationale for framing particular type of hypotheses?
- F. adequacy of the rationale for framing particular type of hypotheses
- G. phrasing of the hypotheses
- H. technical accuracy of the hypotheses
- I. correctness of Language (Grammar & Spellings)

3. Delimitation of study: Present study was delimited to;

- i) M.Ed. offering teacher education institutions of Himachal Pradesh affiliated to Himachal Pradesh University Shimla including the department of education in India.
- ii) Only one parameter i.e. framing research hypotheses in dissertations reported was selected for research purpose.

4. Methodology

4.1 Method

The technique of content analysis was employed in the present study.

4.2 Sample

When the present study was conducted, there were nine institutions affiliated to Himachal Pradesh University running Master of Education course in regular mode. One of these institutions was a Himachal Pradesh University Department and the rest eight were being run by private managements. All the nine institutions were included in the sample for the present study.

Further, classification of dissertations was done supervisor-wise and year wise so as to give equal representation to the all supervisors in a particular session in each institution. It is worthier to mention that the sampled dissertations were selected for the session 2007-08, 2008-09 and 2009-2010.

Hence the stratified sampling technique was employed and total 246 dissertations were selected as sample for present study.

5. The Instrument

In order to find answer to the Research question stated above it was proposed to content analyse the selected dissertations in respect of framing and reporting hypotheses in dissertations submitted by students in the discipline of education and then rate them with respect to selected quality criteria in a continuum.

In view of this a Rating Scale prepared by the investigator was used collecting relevant information. To serve this purpose first step was to define quality characteristics of writing and Framing hypotheses in operational terms against which a dissertation could be rated. For this the literature in the form of research methodology books, research journals encyclopaedias, and dissertation abstracts, surveys of research in education in India as well as internet was scrutinized thoroughly. The material available from the above-mentioned sources was studied scrutinized and listed under appropriate indicators or criteria of quality of stating a hypothesis in a dissertation. These quality criteria for the purpose of uniformity of scoring was partitioned into different rank names such as no, yes, nil, limited, tolerable, high, extremely poor, poor, adequate, moderate, highly unsatisfactory, satisfactory. All these identified quality criteria along with their underline characteristics were considered as a measure of quality of framing a research hypothesis in a dissertation.

The tool was named as rating scale for quality of framing hypothesis. The preliminary draft of the rating scale was discussed with other faculty members and it was revised on the basis of their suggestions. After these three dissertations were evaluated for the quality of framing a research hypothesis in a dissertation and rated using the rating scale. This exercise indicated some shortcomings in the scale. The rating scale was revised again by making modifications at some places. Some more criteria were added and wording of other was changed. This exercise was repeated three times and necessary modifications

were made each time. Finally, the rating scale comprised of the six quality indicators or criteria (shown in table-01) for framing hypothesis in educational research.

a. Validity of rating scale: the rating scale was shown to three teachers who were working in colleges of education, completed their doctoral degree and had more than five years of experience in teaching & guiding students in their dissertation work. They were requested to go through the rating scale and point out how far it was suitable to answer the research question of present study. All the three teachers were of the opinion that the rating scale was quite appropriate to serve the purpose indicating high degree of validity of rating scale

b. Reliability of rating scale: The three investigators along with author separately analysed and rated the same five dissertations using the rating scale. The rating to each subcomponent given by all four persons was matched. The subcomponent/sub criterion where there was disparity in rating was discussed threadbare. Each of the four raters gave reasons for giving a particular rating to the sub criterion. An effort was made to clarify the concept in each characteristic. This exercise was repeated three more times. It was found that the discrepancy in the rating of the three researches decreased after each exercise and at the end of fourth attempt there was quite high consistency in the rating of the three raters. The whole exercise helped to establish consistency between the all investigators in use of rating scale & training of investigator as well on one hand and established reliability of the tool on other hand. All the selected dissertations were rated/assessed college-wise using the following format:

Table-01 Rating scale for Rating Hypotheses

Sr.	Evaluation criterion	Frequencies			
		NO	YES		
A	Has the researcher formulated Hypotheses for the study?	NO	YES		
B	Has the researcher written all the possible Hypotheses?	NO	YES		
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL	Limited	Tolerable	Satisfactory
D	Agreement of Hypotheses with Survey of Related Literature?	NIL	Limited	Tolerable	Satisfactory
E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO	YES		
F	Adequacy of the rationale for framing particular type of hypotheses	NIL	Limited	Tolerable	Adequate
G	Phrasing of the hypotheses	Extremely Poor	Poor	Tolerable	Adequate
H	Technical accuracy of the hypotheses	Extremely Poor	Poor	Tolerable	Adequate
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory	Very Low	Moderate	Satisfactory

6. Data Collection

Investigator visited each of the nine colleges personally, noted down the titles of all the M.Ed. dissertations submitted and evaluated in the college and arranged them session-wise and supervisor-wise. After this, he selected 10 or 12 dissertations (as discussed under sample) per session randomly giving due representation to each supervisor. The investigator was permitted to take the selected dissertations home for evaluation. In one case he was asked to do the needful in the college itself. In either case, the investigator analyzed the dissertations as per the tool and noted the analysis results on the rating scale itself. Later he scored all the dissertations and whole data were tabulated in appropriate Table along with results.

The aggregate frequencies for Hypotheses of the Study reported in the dissertations for each college as well as for all the sampled 246 dissertations are presented in Tables 1 to 10

Table-2: College 1: Number of Dissertations = 30

Sr.	Evaluation criterion	Frequencies			
A	Has the researcher formulated Hypotheses for the study?	NO 0 (0.00)		YES 21 (70.00)	
B	Has the researcher written all the possible Hypotheses?	NO 2 (9.52)		YES 19 (90.48)	
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 1 (4.76)	Limited 4 (19.05)	Tolerable 12 (57.14)	Satisfactory 4 (19.05)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 7 (33.33)	Limited 12 (57.14)	Tolerable 1 (4.76)	Satisfactory 1 (4.76)
E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO 21 (100.00)		YES 0 (0.00)	
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 21 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 1 (4.76)	Poor 9 (42.86)	Tolerable 11 (52.38)	Adequate 0 (0.00)
H	Technical accuracy of the hypotheses	Extremely Poor 4 (19.05)	Poor 11 (52.38)	Tolerable 6 (28.57)	Adequate 0 (0.00)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 2 (9.52)	Very Low 6 (28.57)	Moderate 10 (47.62)	Satisfactory 3 (14.29)

Numbers in parentheses in A indicate percentages out of 30 and from B to J indicate percentages out of 21 because, hypotheses were not required in 9 number of dissertations due the nature of study.

Table-3: College 2: Number of Dissertations = 30

Sr.	Evaluation criterion	Frequencies			
		NO	Limited	Tolerable	Satisfactory
A	Has the researcher formulated Hypotheses for the study?	1 (3.33)		25 (83.33)	
B	Has the researcher written all the possible Hypotheses?	4 (16.00)		21 (84.00)	
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 0 (0.00)	Limited 3 (12.00)	Tolerable 22 (73.33)	Satisfactory 0 (0.00)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 5 (20.00)	Limited 12 (48.00)	Tolerable 8 (32.00)	Satisfactory 0 (0.00)
E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO 25 (100.00)		YES 0 (0.00)	
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 25 (100.00)		Limited 0 (0.00)	Tolerable 0 (0.00) Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 2 (8.00)		Poor 18 (72.00)	Tolerable 5 (20.00) Adequate 0 (0.00)
H	Technical accuracy of the hypotheses	Extremely Poor 3 (12.00)		Poor 16 (64.00)	Tolerable 6 (24.00) Adequate 0 (0.00)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 0 (0.00)		Very Low 7 (28.00)	Moderate 18 (72.00) Satisfactory 0 (0.00)

Numbers in parentheses in A indicate percentages out of 30 and from B to J indicate percentages out of 25 because, hypotheses were not required in 4 number of dissertations.

Table-3: College 3: Number of Dissertations = 30

Sr.	Evaluation Criterion	Frequencies			
		NO	Limited	Tolerable	Satisfactory
A	Has the researcher formulated Hypotheses for the study?	NO 0 (0.00)		YES 27 (90.00)	
B	Has the researcher written all the possible Hypotheses?	NO 5 (18.52)		YES 22 (81.48)	
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 1 (3.70)	Limited 4 (14.81)	Tolerable 22 (81.48)	Satisfactory 0 (0.00)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 19 (70.37)	Limited 8 (29.63)	Tolerable 0 (0.00)	Satisfactory 0 (0.00)
E	Has the researcher given the rationale for	NO 27 (100.00)		YES 0 (0.00)	

	framing particular type of Hypotheses?				
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 27 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 4 (14.81)	Poor 17 (62.97)	Tolerable 6 (22.22)	Adequate 0 (0.00)
H	Technical accuracy of the hypotheses	Extremely Poor 4 (14.81)	Poor 19 (70.37)	Tolerable 4 (14.81)	Adequate 0 (0.00)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 1 (3.70)	Very Low 16 (59.26)	Moderate 10 (37.04)	Satisfactory 0 (0.00)

Numbers in parentheses in A indicate percentages out of 30 and from B to J indicate percentages out of 27 because, hypotheses were not required in 3 number of dissertations.

Table-4: College 4: Number of Dissertations = 30

Sr.	Evaluation criterion	Frequencies			
		NO	YES		
A	Has the researcher formulated Hypotheses for the study?	NO 0 (0.00)	YES 30 (100.00)		
B	Has the researcher written all the possible Hypotheses?	NO 6 (20.00)	YES 24 (80.00)		
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 0 (0.00)	Limited 5 (16.67)	Tolerable 18 (60.00)	Satisfactory 7 (23.33)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 8 (26.67)	Limited 17 (56.67)	Tolerable 5 (16.67)	Satisfactory 0 (0.00)
E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO 30 (100.00)	YES 0 (0.00)		
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 30 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 0 (0.00)	Poor 8 (26.67)	Tolerable 21 (70.00)	Adequate 1 (3.33)
H	Technical accuracy of the hypotheses	Extremely Poor 3 (10.00)	Poor 7 (23.33)	Tolerable 16 (53.33)	Adequate 4 (13.33)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 0 (0.00)	Very Low 5 (16.67)	Moderate 23 (76.67)	Satisfactory 2 (6.67)

Numbers in parentheses indicate percentages out of 30

Table-5: College 5: Number of Dissertations = 30

S. No.	Evaluation criterion	Frequencies			
A	Has the researcher formulated Hypotheses for the study?	NO 0 (0.00)		YES 20 (66.67)	
B	Has the researcher written all the possible Hypotheses?	NO 6 (30.00)		YES 14 (70.00)	
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 2 (10.00)	Limited 4 (20.00)	Tolerable 11 (55.00)	Satisfactory 3 (15.00)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 13 (65.00)	Limited 7 (35.00)	Tolerable 0 (0.00)	Satisfactory 0 (0.00)
E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO 20 (100.00)		YES 0 (0.00)	
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 20 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 7 (35.00)	Poor 8 (40.00)	Tolerable 4 (20.00)	Adequate 1 (5.00)
H	Technical accuracy of the hypotheses	Extremely Poor 13 (65.00)	Poor 5 (25.00)	Tolerable 1 (5.00)	Adequate 1 (5.00)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 3 (15.00)	Very Low 8 (40.00)	Moderate 8 (40.00)	Satisfactory 1 (5.00)

Numbers in parentheses in indicate percentages out of 30 and from B to J indicate percentages out of 20 because, hypotheses were not required in 10 number of dissertations.

Table-6: College 6: Number of Dissertations = 24

S. No.	Evaluation criterion	Frequencies			
A	Has the researcher formulated Hypotheses for the study?	NO 0 (0.00)		YES 24 (100.00)	
B	Has the researcher written all the possible Hypotheses?	NO 13 (54.17)		YES 11 (45.83)	
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 5 (20.83)	Limited 2 (8.33)	Tolerable 15 (62.50)	Satisfactory 2 (8.33)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 16 (66.67)	Limited 7 (29.17)	Tolerable 1 (4.17)	Satisfactory 0 (0.00)

E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO 24 (100.00)	YES 0 (0.00)		
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 24 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 11 (45.83)	Poor 11 (45.83)	Tolerable 2 (8.33)	Adequate 0 (0.00)
H	Technical accuracy of the hypotheses	Extremely Poor 21 (87.50)	Poor 1 (4.17)	Tolerable 2 (8.33)	Adequate 0 (0.00)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 9 (33.33)	Very Low 12 (50.00)	Moderate 2 (8.33)	Satisfactory 1 (4.17)

Numbers in parentheses indicate percentages out of 24

Table-7: College 7: Number of Dissertations = 24

S. No.	Evaluation criterion	Frequencies			
A	Has the researcher formulated Hypotheses for the study?	NO 0 (0.00)	YES 20 (66.67)		
B	Has the researcher written all the possible Hypotheses?	NO 8 (40.00)	YES 12 (60.00)		
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 6 (30.00)	Limited 0 (0.00)	Tolerable 12 (60.00)	Satisfactory 2 (10.00)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 17 (85.00)	Limited 3 (15.00)	Tolerable 0 (0.00)	Satisfactory 0 (0.00)
E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO 20 (100.00)	YES 0 (0.00)		
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 20 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 11 (55.00)	Poor 8 (40.00)	Tolerable 1 (5.00)	Adequate 0 (0.00)
H	Technical accuracy of the hypotheses	Extremely Poor 15 (75.00)	Poor 5 (25.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 5 (25.00)	Very Low 11 (55.00)	Moderate 4 (20.00)	Satisfactory 0 (0.00)

Numbers in parentheses in indicate percentages out of 24 and from B to J indicate percentages out of 20 because, hypotheses were not required in 4 number of dissertations.

Table-8: College 8: Number of Dissertations = 24

S. No.	Evaluation criterion	Frequencies			
A	Has the researcher formulated Hypotheses for the study?	NO 1 (4.17)		YES 20 (83.33)	
B	Has the researcher written all the possible Hypotheses?	NO 6 (30.00)		YES 14 (70.00)	
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 3 (15.00)	Limited 3 (15.00)	Tolerable 14 (70.00)	Satisfactory 0 (0.00)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 16 (80.00)	Limited 4 (20.00)	Tolerable 0 (0.00)	Satisfactory 0 (0.00)
E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO 20 (100.00)		YES 0 (0.00)	
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 20 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 7 (35.00)	Poor 12 (60.00)	Tolerable 1 (5.00)	Adequate 0 (0.00)
H	Technical accuracy of the hypotheses	Extremely Poor 7 (35.00)	Poor 13 (65.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 2 (10.00)	Very Low 16 (80.00)	Moderate 2 (10.00)	Satisfactory 0 (0.00)

Numbers in parentheses in indicate percentages out of 24 and from B to J indicate percentages out of 20 because, hypotheses were not required in 3 number of dissertations.

Table-9: College 9: Number of Dissertations = 24

S. No.	Evaluation criterion	Frequencies			
A	Has the researcher formulated Hypotheses for the study?	NO 0 (0.00)		YES 19 (79.17)	
B	Has the researcher written all the possible Hypotheses?	NO 14 (73.68)		YES 5 (26.32)	
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 6 (31.58)	Limited 10 (52.63)	Tolerable 3 (15.79)	Satisfactory 0 (0.00)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 11 (57.89)	Limited 8 (42.11)	Tolerable 0 (0.00)	Satisfactory 0 (0.00)
E	Has the researcher given the rationale for	NO 18 (94.74)		YES 1 (5.26)	

	framing particular type of Hypotheses?				
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 19 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 7 (36.84)	Poor 11 (57.89)	Tolerable 1 (5.26)	Adequate 0 (0.00)
H	Technical accuracy of the hypotheses	Extremely Poor 10 (52.63)	Poor 7 (36.84)	Tolerable 2 (10.53)	Adequate 0 (0.00)
I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 4 (21.05)	Very Low 13 (68.42)	Moderate 2 (10.53)	Satisfactory 0 (0.00)

Numbers in parentheses in indicate percentages out of 24 and from B to J indicate percentages out of 19 because, hypotheses were not required in 5 number of dissertations.

Table-10: All Colleges: Number of Dissertations = 246

S. No.	Evaluation criterion	Frequencies			
A	Has the researcher formulated Hypotheses for the study?	NO 2 (0.82)		YES 206 (83.74)	Not required 38 (15.45)
B	Has the researcher written all the possible Hypotheses?	NO 64 (31.07)		YES 142 (68.93)	
C	Conformity of Hypotheses with objectives/research questions of the study?	NIL 24 (11.65)	Limited 35 (16.99)	Tolerable 129 (62.62)	Satisfactory 18 (8.74)
D	Agreement of Hypotheses with Survey of Related Literature?	NIL 112 (54.37)	Limited 78 (37.86)	Tolerable 15 (7.28)	Satisfactory 1 (0.49)
E	Has the researcher given the rationale for framing particular type of Hypotheses?	NO 205 (99.52)		YES 1 (0.49)	
F	Adequacy of the rationale for framing particular type of hypotheses	NIL 206 (100.00)	Limited 0 (0.00)	Tolerable 0 (0.00)	Adequate 0 (0.00)
G	Phrasing of the hypotheses	Extremely Poor 50 (24.27)	Poor 102 (49.52)	Tolerable 52 (25.24)	Adequate 2 (0.97)
H	Technical accuracy of the hypotheses	Extremely Poor 80 (38.83)	Poor 84 (40.78)	Tolerable 37 (17.96)	Adequate 5 (2.43)

I	Correctness of Language (Grammar & Spellings)	Highly Unsatisfactory 26 (12.62)	Very Low 94 (45.63)	Moderate 79 (38.35)	Satisfactory 7 (3.40)
----------	-----------------------------------------------------------	-----------------------------------------	----------------------------	----------------------------	------------------------------

Numbers in parentheses in indicate percentages out of 246 and from B to J indicate percentages out of 206 because, hypotheses were not required in 38 number of dissertations

7. Analysis and Interpretation of Data

The Analysis and interpretation of aggregate frequencies presented in above tables from table 1 to 10 have been discussed here criteria wise from evaluating criteria **A to I as under:**

A. Has the Researcher Formulated Hypotheses for the Study?

The output to the item ‘Has the researcher formulated hypotheses for the study?’ was in:

a. **yes** for maximum 100 per cent of the cases in two institutions and for minimum 67 per cent in two institutions.

b. **no** for maximum 4 per cent cases in one institution and minimum zero per cent in seven institutions.

c. **yes** in 206 (84%) cases, **no** in 2 (1%) cases and not required in 38 (15%) cases when all the 246 dissertations were taken into account submitted in nine institutions

On the basis of the above, it may be said that the researchers have formulated hypotheses in almost all the cases where they were required when all the 246 dissertations were taken together. The formulation of hypotheses was not required in some cases due to qualitative nature of the problems (15%).

Over all the quality in terms of ‘has the researcher formulated hypotheses for the study?’ was satisfactory in the sampled dissertations.

B. Has the Researcher written all the Possible Hypotheses?

The output to the sub-item ‘Has the researcher written all the possible hypotheses?’ was in:

a. **yes** for maximum 90 per cent dissertations in one institution and minimum 26 per cent cases in one institution.

b. **no** for maximum 73 per cent cases in one institution and minimum 9 per cent in one institution.

c. **yes** in **142 (69%)** dissertations, and **no** in 64 (31%) cases when all the 206 dissertations submitted in nine institutions in which hypotheses were formulated were taken into account.

On the basis of the above, it may be said that in 69% cases all the possible hypotheses were formulated when all the 246 dissertations were taken together.

Over all the quality in terms of ‘has the researcher written all the possible hypotheses?’ was moderate in the sampled dissertations.

C. Conformity of Hypotheses with Objectives/Research Questions of the Study

Agreement of the hypotheses of the study with objectives/research questions was found to be:

a. **satisfactory** for maximum 23 per cent cases in one institution and minimum zero in four institutions.

b. **tolerable** for maximum 81 per cent in one institution and minimum 16 per cent in one institution.

c. **limited** for maximum 53 per cent cases in one institution and minimum zero per cent in one institution.

d. **nil** for maximum 31 per cent cases in one institution and minimum zero per cent in two institutions.

d. **satisfactory** in 18 (9%), **tolerable** in **129 (63%)**, **limited** in 78 (17%) and **nil** in **24 (11%)** cases when all the 206 dissertations were taken into account submitted in nine institutions.

On the basis of the above, it may be said that the quality of objectives in terms of ‘conformity of hypotheses with objectives/research questions of the study’ was satisfactory or tolerable in majority of the cases (72%) when all the 206 dissertations were taken together.

Over all the quality of objectives in terms of ‘conformity of hypotheses with objectives/research questions of the study’ was moderate in the sampled dissertations.

D. Agreement of Hypotheses with Survey of Related Literature

The Agreement of hypotheses with survey of related literature was found to be:

- a. **satisfactory** for maximum 5 per cent dissertations in one institution and minimum zero per cent in eight institutions.
- b. **tolerable** for maximum 32 per cent dissertations in one institution and minimum zero per cent in five institutions.
- c. **limited** for maximum 57 per cent dissertations in two institutions and minimum 15 per cent in one institution.
- d. **nil** for maximum 85 per cent in one institution and minimum 20 per cent in one institution.
- e. satisfactory in 1 (4%), tolerable in 15 (7%), **limited in 78 (38%)** and nil in 112 (54%) cases when all the 206 dissertations submitted in nine institutions in which hypotheses were framed were taken into account.

On the basis of the above, it may be said that the quality of hypotheses in terms of 'agreement of hypotheses with survey of related literature' was limited or nil in majority of the cases (92%) when all the 206 dissertations were taken together. However, when taken independently, the quality of the hypotheses in terms of 'agreement of hypotheses with survey of related literature' was slightly better in three colleges, and far below in six colleges in comparison to the collective trend. Over all the quality in terms of 'agreement of hypotheses with survey of related literature' was highly unsatisfactory in the sampled dissertations.

E. Has the Researcher given Rationale for framing particular type of Hypotheses?

Rationale for framing particular type of hypotheses was found to be given in merely one dissertation when all 206 dissertations submitted in nine institutions in which hypotheses were framed were taken into account.

F. Adequacy of the Rationale for Framing Particular Type of Hypotheses

Adequacy of the rationale for framing particular type of hypotheses was found to be nil in all the dissertations when all 206 dissertations submitted in nine institutions in which hypotheses were framed were taken into account.

G. Phrasing of Hypotheses

Phrasing of hypotheses was found to be:

- a. **adequate** for maximum 3 per cent dissertations in two institutions and minimum zero per cent in seven institutions.
- b. **tolerable** for maximum 70 per cent dissertations in one institution and minimum 5 per cent in two institutions.
- c. **poor** for maximum 72 per cent dissertations in one institution and minimum 40 per cent in two institutions.
- d. **extremely poor** for maximum 55 per cent dissertations in one institution and minimum 27 per cent in one institution.
- e. adequate in 2 (1%), tolerable in 52 (25%), poor in 102 (50%) and extremely poor in 50 (24%) cases when all the 246 dissertations submitted in nine institutions were taken into account.

On the basis of the above, it may be said that the quality of hypotheses in terms of 'phrasing of hypotheses' was poor or extremely poor in majority of the cases (74%) when all the 206 dissertations were taken together. However, when taken independently, the quality of the hypotheses in terms of 'phrasing of hypotheses' was better in two colleges and far below in seven colleges in comparison to the collective trend.

Over all the quality of the hypotheses in terms of 'phrasing of hypotheses' was not satisfactory in the sampled dissertations.

H. Technical Accuracy of the Hypotheses

Technical accuracy of the hypotheses was found to be:

- a. **adequate** for maximum 13 per cent dissertations in one institution and minimum zero per cent in seven institutions.
- b. **tolerable** for maximum 53 per cent dissertations in one institution and minimum zero per cent in two institutions.
- c. **poor** for maximum 70 per cent dissertations in one institution and minimum 4 per cent in one institution.
- d. **extremely poor** for maximum 87 per cent dissertations in one institution and minimum 10 per cent in one institution.
- e. adequate in 5 (2%), tolerable in 37 (18%), poor in 84 (41%) and extremely poor in 80 (39%) cases when all the 206 dissertations submitted in nine institutions were taken into account.

On the basis of the above, it may be said that the quality of the hypotheses in terms of 'technical accuracy of hypotheses' was poor or extremely poor in majority of the cases (80%) when all the 206 dissertations were taken together. However, when taken independently, the quality of the hypotheses in terms of 'technical accuracy of hypotheses' was slightly better in one college, quite similar in two colleges and far below in six colleges in comparison to the collective trend.

Over all the quality of the hypotheses in terms of 'technical accuracy of hypotheses' was highly unsatisfactory in the sampled dissertations.

I. Correctness of Language (Grammar and Spellings)

The correctness of language in hypotheses was found to be:

- a. **satisfactory** for maximum 14 per cent dissertations in one institution and minimum zero per cent in five institutions.
- b. **moderate** for maximum 76 per cent in one institution and minimum 8 per cent in one institution.
- c. **very low** for maximum 80 per cent in one institution and minimum 16 per cent in one institution.
- d. **highly unsatisfactory** for maximum 33 per cent in one institution and minimum zero per cent in two institutions.
- e. satisfactory in 7 (3%) of the dissertations, moderate in 79 (38%), very low in 94 (46%) cases and highly unsatisfactory in 26 (13%) cases when all the 246 dissertations were taken into account submitted in nine institutions.

On the basis of above, it may be said that the quality of hypotheses in terms of 'correctness of language in hypotheses of the study' was moderate or very low in most of the cases (84%) when all 206 dissertations were taken together. However, when taken independently, the quality of hypotheses in terms of 'correctness of language' was better in two colleges, quite similar in five colleges and far below in two colleges in comparison to the collective trend.

Over all the quality of hypotheses in terms of 'correctness of language' was unsatisfactory in the sampled dissertations.

8. Discussion and Suggestions

The results indicate that quality of writing research **hypotheses** in respect of almost all the above listed quality parameters under framing research hypotheses the quality is poor in almost all the institutions except college 1 and college 4 where hypotheses' framing in most of the components was moderate. It was also found that in one case each in two institutions research hypotheses were not framed at all where it would have been framed by looking at the topic and its treatment inside the dissertation.

One of the reasons for the tendency that researchers continue with an established style and are not innovative may be attributed to the lack of qualified and experienced staff in institutions running M.Ed. course. The unapproved (non approval by competent authorities), unqualified and totally inexperienced teachers have been noticed by the author working as research supervisors of M.Ed. students. There are instances where the candidates who just passed their M.Ed. examinations have been recruited by the colleges without interview and allotted them M.Ed. students for supervising research dissertations.

Majority of research supervisors, especially in privately managed colleges, lack theoretical orientation in research methodology themselves and have completed their own M.Ed. dissertations in a highly casual manner.

In such a scenario, the teachers copy a simple technique from their own or some other dissertations and continue with the same year after year. In other cases, one of the teachers, who is or considered to be better, becomes a trend setter for others. It may seem awkward to say but is a fact that barring a few, majority of M.Ed. supervisors do not clear idea how to frame research hypotheses. It cannot be expected from them that they will guide their students in this regard.

The second important reason for continuation of such a trend is the casual approach used in the evaluation of dissertations. In fact, there is hardly any evaluation of dissertations. The examiners generally do not read the dissertations as noticed by investigator in discussion with many examiners. In most of the cases, the dissertations are handed over to examiner on the spot. He/ she completes the formality of viva-voce examination by asking a few questions and assign marks as desired by the supervisor or head of the institution. Due to this supervisor never feels accountable for and becomes still more relaxed in the following years.

Thirdly, the instructional techniques used for teaching research methodology course are strictly theory oriented. The students are not encouraged simultaneously to perform practical, activities related to the taught concepts. In the end it remains only in teaching and not converted to learning.

References

1. Black, Thomas R. (2002). Understanding Social Science Research. New Delhi: Sage Publications India Pvt. Ltd., p-27.
2. Koul Lokesh (2009). Methodology of Educational Research. New Delhi: Vikas Publishing House Pvt. Ltd.
3. Kumar, Ranjit (2009). Research Methodology- A Step-by-Step Guide for Beginners. Delhi: Pearson Education in South Asia.
4. Moris, Robert and Travers, William (1969). An Introduction to Educational Research. NY: MacMillan Publishing Co. Inc., pp
5. Mouly, J. George (1964). The Science of Educational Research. New Delhi: Eurasia Publishing House Pvt. Ltd., pp
6. Nachmias, D. And Nachmias, O. (1981). Research Methods in Social Sciences. N.Y.: St. Martin Press, Inc., pp 65-66.