

How to Write Scientific Contents in Human and Islamic Sciences

Valiollah Khoshtinat^{1*}, Akbar Noorian²

1. Associate professor and faculty member, Department of Technology and Islamic sciences. Payame Noor University (PNU). I.R, Iran.
2. Instructor Visiting of College Education Sciences and Psychology Payame Noor University (PNU). I.R, Iran.

***Corresponding author email:** vkhoshtinat@gmail.com

Abstract: Dissertation or thesis is a writing that students write about the specific issue that is related to their educational field to receive their academic degree. In thesis, students propose a question or subject and answer to it by analysis, scientific or experimental experience. In other words, thesis includes subject deduction, providing experimental research, result of internship, or abstract of the learnt lessons in their educational years that are written or formulated by professors' helps. The objective of the present research is to know how to write scientific contents particularly thesis. The methodology of this research was descriptive. Findings of this research show that each thesis nearly has a mutual framework consist of 5 chapters that the first chapter includes introduction, problems statement, necessity, and importance of research, objectives, hypotheses, and questions about research, theoretical and practical definitions. Chapter 2 has title of literature and research background including theoretical framework and theoretical and practical literatures. Chapter 3 with title of methodology includes methodology of research, statistical population, population sample, analysis technic, tool, and data collection. Chapter 4 with title of data analysis, analyzes the collected data. Chapter 5 has title of conclusion, discussion, and suggestion. Logical and scholarly interpretation of researcher by comparison the present results are stated in chapter 4.

Keywords: scientific method, thesis, scientific contents

INTRODUCTION

Human has been courageous about his environment since his birth and has tried to solve the sophisticated and complicated phenomena of life. For example, from wind, rain, and thunder motivating primal human curiosity to daily issues that has direct effect on probability and welfare of human survival. All of us must have proper and accurate answers to the questions of how to learn? How to teach? How to guide students? How to organize education? And we face with tens of other issues, and finally make a decision. (Delavar, 2004: 4)

A geographical map of a city is the situation of various regions of that city and shows their physical relationship, more accurate and detailed map better shows the related realities of those regions. Application of with the mentioned accurate facilitates the related activities. Various fields of human knowledge generally and behavioral sciences particularly can be imagine like maps. However, these maps imagine phenomena and their relationships besides accomplishment of other objectives such as determination of the maker factors of these phenomena and prediction of their evolution manners in future. In this case, phenomena can be described, their occurrence manner can be predicted, and their control manner can be manifested, and finally a collection of theoretical relationships can be obtained by achievement of the cognition of a knowledge field. Generally, human has used various methods to formulate a map of world realities around him all over the history (Mouly, 1970)

Problem statement

Many people in confrontation with a writer or teacher asked: how you reach this success and how you got skill in writing, teaching, and controlling a class? (Mohadesi, Javad, 2015: 7)

Many people are interested in research and studies but they don't know how to act not to waste their forces and opportunities and refer to which books to find their passives, and in which references find which issue? (Previous reference) or they want to study and taken notes. However, they don't know what to do and accomplish, because they don't have experience. Here the issue "method" is proposed that skill leans on experience. These practical skills are called in people language as methodology, methods, techniques, procedures, practices, regulations, rules, trick, and skill. "Methodology" is a shortcut to reach aims and people that must be "methodical" in their scientific, art, technical, educational, etc. Tasks to reach goals sooner and have less time and capital waste.

Therefore, they must learn tasks like swimming, calligraphy, painting, sewing, gardening, driving, language learning, Qur'anic training, reading their teacher to reach the goal in the minimum time, and hope to their growth and progress (Mohadesi Javad, 2015: 8)

All books that are in education path of these methods are sacred and valuable and results of the students' life and the work of the teachers of different disciplines in a wider range, and familiarize the beginners or unfamiliar people to the sophisticated and good passing way and arriving to goals soon. Imam Ali (pbuh) says: the beginning of the wisdom is experience." (Qorarolhekam, Hadith 4916)

According to the mentioned issues, this article tries to help to all people wanting to know how and by which technics can write their thesis, proposal, research, etc.

Report in elementary part includes title, institute logo, authors, supervisor professor, consultant professor, proposal number, Persian abstract, contents, contents of tables, diagrams, figures, etc.

Title page

The name of the main researchers, name, and address of the submitting university, date of submission, and the mentioned cases previously are the notes brought in this part. In addition, mentioning the marginal points must be avoided. These pages except title page are numbered with alphabet and are calculated in all reported pages.

Abstract

Each proposal (even very short and small) must have an abstract. Most organizations often only use an abstract of their research in their memories (for example: about their successful designs or confirmation of the previous year budget). Although, this part is written from the first, they must be prepared at the end very short (nearly 211 words) in one (or maximally 2 pages) page. If table has a content with Roman numerals, or doesn't have, pages are numbered by Arabic numbers. An abstract must fully explain the asked questions in proposal (of course except budget), because many readers rely on just abstracts to gain more information, and their abstract must help to remind the main points of a research. If the abstract is separated, all part of proposal must be illustrative. Generally, an abstract is the most important part of a proposal. It is called at the beginning of the report is an abstract and at the end with more precise report as summary.

Table of content

Very short reports usually don't have table of contents, but the great and detailed proposal have list of figures, tables, diagrams, and appendixes in addition to table of content. Explanations are usually indicated by Roman or Arabic numbers, but if they are very short, all are written in one page. Table of content includes all the main points. Even the summary of table of content isn't written without page number.

In cases that the author considers the possibility of proposal issues to be considered wrongly by the similar issues, he/she can add a part of limitations in table of contents and text.

Some believe that the problems of time and cost must be considered hidden as they fear the readers stop the proposal by seeing the budget (that is practically true). It must be assumed that our reader is not familiar with the issue. Managers of research centers tend to gain the general idea from proposal before giving the research proposal to the experts to be judged scientifically, but the importance of the proposal mustn't be neglected. It is sometime useful in introduction of the checked problem to say what they are not (limitations). You can explain the main hypotheses. The general tune and slogan of introduction must be with a respectful reliance and courage and prevent emotional extreme (WHO, 1997).

Fist chapter of thesis includes overviews, problem statement, important and necessity of research, objectives, theoretical and operational definitions.

Research overview

The first part of report includes overviews including problems statement, importance of research, necessity of research, questions, objectives, hypotheses, and definition of a term. The beginning of this chapter is efficient documented knowledges and awareness to propose a problem or problem statement. The reasons of the importance of this problem must be stated very shortly and without overstatement is the reader or supporter must be convinced for the problems in its and its importance, and finds the researcher the savior from that problem. In other words, researcher must take the reader to the pick of problem and there shows the survival only through the research path. Therefore, motivation is made in reader, and reliable documentation from valid resources and full

explanation for all research steps that are summarized and transparent in the proposal are necessary to persuade the reader.

Problem statement

Background and literature review of this part are not necessary if the research issue is relatively simple and if several sentences are in introduction about the background. However, this part is necessary if the comparison of the previous studies with this study is the main objective of the researcher and the comparison of results are confirmed.

Identification and problem statement

Researcher must collect the present problems and offer it for the reader as a hill of problems as the reader is hopeless of being any solution. Then, the researcher introduces the savior angel and makes him/her hopeful and convinces him/her by research results. In problem statement, the background of similar studies is enough, but if necessary, literature review in more detailed studies can state this part more comprehensively. Even when a scientific report is written for people in the same specialized field, his mind must be prepared to accept this matter. Research commissions and referee group can be simulated to the trial than put you in defense positions. Therefore, as you offer the general fields of the subject much extensive as possible and make them accept the importance of the subject with logical and documented manner, you will be acquitted more quickly.

In problem statement and importance of subject, there are important aspects such as the procedure of problem procedure or the problem of extension and its aspects and about what it is or will be, the seriousness of the problem, the consequences of the problem, geographical distribution, age and sex problems, the problem of research necessity, research background, and connection of the present research to the previous ones, how to solve ambiguity and problem, objectives, questions, and hypotheses will be briefly mentioned in proposal and in detailed in thesis. Assume in problem statement that you want to advertise about the new product. For example, advertisements of a special food as all people believe in your impartiality and have more effect in your advertisement about your product. You had better talk a little about the benefits of that food and little and little mention a good and high quality food, and finally announce that your mentioned food has all the condition of a high-quality food. A total principle to follow a logical trend in problem statement is to define generally and then talk about the details (Ansari, Maryam, 2007).

For example, if the subject is checking the effect of a specific preventive tool from pregnancy, it is better refer to the high population problems and then ways to control population, and prevention pregnancy, and finally introduce the mentioned method.

Objectives, questions, and hypothesis this chapter includes objectives, questions, and hypothesis. Used clauses in each one have its special literature as the explicit and measurable worlds are more used in objectives. In some studies, research background (theoretical bases) has attributed to all of chapter 2 for the importance or specialty or disagreements among experts.

Objectives

After problem statement in scientific research, the researcher wants to state the operational face of research by objective observation. Researcher just states the objectives in some studies instead of asking questions or hypothesis. This usually happens in qualitative research, for example, a research can be stated as following: identification of the evolution of vocational education in Iran. To state an objective, a reactive verb must be used (Sarmad et al., 2002: 34)

Generally, objectives are divided into 4 groups that are summarily stated as following:

General objectives (main or final)

This is what a research obtains generally. The general objective just shows the direction and is not measurable, and its best writing is repetition research title minus time, place, and with partial changes. In other words, general objective is more transparent than title, because terms of study, investigation, etc. changes to words of determination, estimation, etc. The general objective must be brief, comprehensive, and measurable.

Partial (detailed, special) objectives

These objectives are exactly the small pieces of general objectives. Therefore, the words of determine, compare, prove, calculate, describe, establish, determine average score, and so on must be used to be measurable. These objectives must be objective, practical, and measurable and stated by measurable words such

as central indexes and statistical dispersion (mean, variance, etc.) in quantitative research. Words such as designing hospital admission form, and so on are provided.

Partial or special objectives have special research words depending on the type of research. For example, frequency distribution and percentage in quantitative research, determination the mean score and in qualitative changeable research to quantitative research are used, and image, interview, observation, etc. are used in fully qualitative research instead of checklist and questionnaire. "Determination the effective factors, so on" are used as qualitative words. In other words, frequency distribution, crossover tables, and diagrams are used in changeable ranking and nominal (qualitative) variables to qualitative variable, and determination of score mean, middle, mode, and so on are used in relative, and distance variables (quantitative).

While writing objectives, the related statistical analyses, objective and measurable words for the end of research must be mentioned by the researcher since the beginning of research. For example, if the studied variables are quantitative, calculation of means and if variables are qualitative, calculation of frequency distribution and percentage must be mentioned by the researcher not to face with ambiguity and lack of information at the end of research.

Special (specific) objective: this is a specific part of the general objective. It means the general objective is divided to smaller element that is logically coherent (Vatanpour, Mahdi, 2007).

Applied objectives

They mean application of the obtained results from a study. For example, planning, education and so on. Enforceability, realism, clear wording, and ultimately measurability at the end of the plan, and the objectivity of the objectives are the most important points of it. The objectives of a research project reflect a summary of what must be obtain by accomplishment of it. Objectives must have a close relationship with problem statement. For example, if the subject is low level of using children clinic, the objective of the research will be the determination of the reasons of low level of using children clinic to improve it.

The applied objective states what about using the results of research are proposed. For example, educational application. What is the practical objective in studies? Where the results will be used? All of them will be stated in form of applied objectives. (SArmad, Zohreh, 2004)

Secondary objectives

It is better to state the main objectives (descriptive or analytical) objectives as the secondary objectives. However, if researchers mention the other objectives, they can state them as secondary objectives in their final report. Sometimes new relationships among variables are occurred to the researcher mind that can be stated as the secondary objectives that can be extracted and offered as the report to the specific organization or a journal. (Shams, 2014: 24-26)

Research Questions

The questions are the same as specific objectives and asking question makes them more transparent. If the objective is descriptive or qualitative, the same objective must be written as a question clauses, and if there is a comparison or evaluation among variables, the similar number of objectives (questions) and then hypotheses must be written. The comparative objectives are only written as hypothesis. Each objective (question or hypothesis) must be written or is better to write with more than 3 objective questions (measurable) in a questionnaire to measure the objectives. Sometimes the researcher brings the comparison among variables as hypotheses, besides writing them as objectives and questions. In this case, the special objectives are similar to the sum of questions. This comparison is mentioned in description the results of chapter 4 with diagrams, tables, or analysis with correlation and Pv tests. However, if the comparison of objectives or questions is asked to describe information, hypotheses can be written only for comparative objectives (questions). (The same reference: 28)

Generally, research questions can be classified into 3 groups: 1- descriptive, 2- relationship, 3- difference questions.

Descriptive questions: the questions words of "what", "how", and "which" are used in this types of question.

Relationship question: in these questions, how to relate two variables is mentioned, for example, what is the relationship between conception and academic achievement?

Difference question: these questions deal with difference of variables and are usually state as following: is there any difference between girls and boys academic achievement in the fifth grade in elementary school?

It must to be noticed that research questions are no stated with direction, because there is no prediction about the relationships among variables. (Sarmad et al., 2002: 34-35)

Research Hypotheses

Research hypotheses are a wise assumption about two or several variables. Hypothesis is actually a suggested solution of a researcher to answer to the problem. Van Dalen (1973) believes that hypothesis is like a powerful projector that enlightens the way for the researcher (Delavar, 2004: 59)

Hypothesis in analytical or comparative studies (not descriptive that doesn't have a hypothesis) is a declarative sentence that is written against comparative objective and shows being less or more of a variable or a feature than another variable or feature and more generally having a (positive or negative) relationship. One of two hypotheses of no relationship (H_0) and relationship (H_1) are usually written. Hypotheses find answer by comparison the means n quantitative variables and frequencies in qualitative variables as p -value by spss software and statistics expert. Hypotheses are actually the same as initial assumption of the researcher that is proposed by past awareness and knowledge and evaluate it during research. Hypotheses are obtained according to the comparative questions of the research equaling to the hypotheses. Testing and comparison hypotheses are the same as variables comparison in statistics. Application of the hypothesis is used or H_0 is called the declarative sentence. For example, X (cigarette) on variable Y (cancer) doesn't have any relationship. H_0 uses statistical variables such as mean, Standard deviation, and variance in determination of the quantitative variables and comparison the frequencies in qualitative variables with T-test and Chi-2 (δ) test, respectively to test these hypotheses. As it was mentioned, if an objective is relationship evaluation type or analytical or comparative, the same objectives are analyzed as hypotheses and evaluation of relationships in short-term between a positive and negative (direct relationship is +1, and negative relationship is -1) and by statistical tests (quantitative by t-test, and qualitative by Chi-square) (Shams, 2014: 29-30).

Structures, conception, and variable

Conception is a new form of observable evidences that indicates similarities or mutual aspect among them. Conceptions are abstract words used to explain or give meaning to our experiences. For example, "academic achievement" is the observable conception by performance (class marks) of students in various lessons.

Some worlds such as "motivation", "self-concept", "stress", and "social abilities" are not directly observable. These sophisticated conceptions that are in high level of "abstract" are called "structure". Structures are usually derived from theories. "Social abilities" is a structure, because it refers to social, cognitive, and emotional skills from one hand and to socialization process and special experiences in interpersonal relationships on the other hand. Observation of social abilities is possible just by making a specific conditions and variables.

Variable is the characteristic of the observed structure. Variable is a quantity taking various values from unit to unit or a condition to another condition. More precisely, variable is a symbol that number and values are attribute to it. For example, the obtained scores from testing an academic achievement is a variable, because it is different from a person to another person or at least all all people get similar score from it (Sarmad et al., 2002: 39-40)

Research Variables

Quantitative variables

Research Variables

Quantitative variables (have length, width, height, weight, and volume such as weight) and qualitative variables (are without emotional aspect and measurable) is the simplest division based on size and degree. These two types of variable are usually divided to 4 groups of relative-distance and nominal-ranking that the first two ones are measurable and quantitative like weight and heat and the second two ones are ungradable and qualitative like blood group and literacy. The quantitative variables are called parametric or measurable variables and qualitative variables are called non-parametric or non-measurable in SPSS software, and a specific test is suggested for comparison and analysis of variables.

Variables that are divided to independent, dependent, and neutral variables based on effect on others.

Dependent (caused) variable such as lung cancer that is dependent on smoking.

Intendent or main variable such as smoking effect on lung cancer that is dependent variable.

The effective conflicting variables such as air in the above mentioned example.

Intersecting (ineffective) variable such as eating special food in the mentioned example.

Background variables such as age and gender in the mentioned example.

Exchangeable qualitative to quantitative vice versa variables such as changing education to score or exchangeable quantitative to qualitative variable such as age and its classification to teenager, young, middle age, etc.

Two or several- value variable such as sex with two values of male and female with two, three, four, and several statuses such as satisfaction percentage.

Variables classification to be testable (such as the effect of two acids in chemistry) and non-testable (such as dignity survey, traditional and historical studies, and the discovery of unknowns in them) (Delavar, 2004: 35-40). After selecting variables based on research background, hypotheses or questions are identified, then operational definition of variables are offered.

Conceptual And Operational Definitions

Structures and variables can be defined as two following forms: conceptual definition and operational definitions... the conceptual definition refers to the definition of a word by other words. In other words, abstract words and assumed criterions are used in this type of definition. This type of definition helps to identify the nature of a phenomenon and plays an important role in the logical process of hypothesis formulation. Conceptual definition must be changed to the operational definition until it can be observed. For example, intelligence can be defined as the capacity of learning, abstract thought, or intellectual activity. This conceptual definition of intelligence changes to the operational definition to be observable.

Operational definition: this definition is based on the observable features. In this statement, the phrase "observation" refers to the important notion in operational definition, operational definition indicates the researcher activities in manipulation or measurement of a variable. In other words, operational definition guides the researcher about what should be done and what is its doing technic (Sarmad et al., 2002: 40).

Chapter 2: Research Background and Literature

Theoretical bases if a problem is stated in this part using valid librarian and virtual resources (data banks) with research background (Persian and English) by mentioning to reference by APA or Vancouver Harvard Method.

Research Backgrounds

Undoubtedly, no research is done in vacuum without relationship with other studies, and a researcher should always shows the relationships with his/her research with the others. Principally, a good research is the extender of the passed way by others, and becomes the basis of the further researchers' basis. In other words, each research proposal is in the networks of linked studies to the subject, and drawing these inks is the responsibility that must be accomplished in research background part.

Theses of graduate education are not exceptional from this rule and must show their link somehow to the previous works. This link is usually drawn in the chapter 2 of theses in most fields, particularly in human and social sciences, and is mostly introduced under the title of "research literature". Of course, this title is the literal translation of its English expression.

The researcher must determine the study field exactly and refer to data banks and bases using the main keywords and have full and all-aspect exploration to examine research background. In other words, the researcher must formulate "search strategy" in this step. Search strategy means identification the most proper keywords and their combination with each other to help to "logical performances" to find the best result from search data banks. For example, if the research subject studies "users satisfaction from services of academic libraries reference". In this case, three main keywords include "users' satisfaction", "references services," and "academic librarians". Combination of three keywords with performance of "and" conjunction will probably have related results. If what obtained by combination of three keywords is not efficient, one of them must be omitted in another search to have more extensive level. Finally, combination of these keywords and other related words can have good results. The aim to say practical backgrounds is finding similar results from similar studies to this research to compare and deduct the results with this research. This comparison must be stated in chapter 5 called "discussion and conclusion". Domestic and foreign studies with their findings are talked here briefly with mentioning references to compare to the results of the present research research findings. These backgrounds to compare are stated in chapter five. (Shams, 2014)

Chapter 3 of thesis: research methodology

Writing the research proposal and transparent definition of its important keywords are very necessary before writing methodology such as the studied variables, studied population or scientific and statistical sampling method, domestic and foreign people from research, population or sample size, methods and data collection tool, description method, data analysis method, type of test or correlation, etc. In model or statistics, reliability and validity before and after experimental execution, result reporting method such as table, diagram, correlation, etc.

along with one by one of the proposal objectives. Attention to the studied variables according to quality quantitatively (distant relative) or qualitatively (nominal - rank), type of research, experimental execution, initial description and analysis of the initial solutions etc. are very important necessities.

First of all, the researcher must mention the variables in the first step, then describe and analyze them, and finally type of research. By these three presumptions, it is ascertained that data collection tool, type of census or sampling, and other execution steps are more transparent and indicated. The type of study, variable, and test are related to each other more than the other words and all of them become transparent and defined with specific objectives. This part is like a story and refers to the beginning of the research to the end by brief explanation of steps or activities of the research (type of study, the studied population, data collection method, etc.) (Allen, 2009). Report includes findings or results (without interpretation of the researcher). Report in this part if answer starts and ends to the most important objectives, questions, or hypotheses without any interpretation. Here, tables are used for short results and diagram for the longer information, and even diagrams and figures. The obtained results from tests are stated in this part without interpretation. In this part, clauses are stated with very simple and past sentences. The title of tables are written on above and the title of diagrams are written on the below with number and chapter.

Note: if some times the researcher compares or write relationships in question forms without writing hypotheses, specific objectives equals to sum of questions.

A) Data analysis or description of findings (answer to the research questions or objectives)

Data is collected using the valid tool such as questionnaire and inserted data of questionnaires to SPSS software (names codes are in the first column and number codes are in SPSS rows) and using four main and very simple operations, frequencies and statistical indexes (central indexes such as mean and dispersion such as standard deviation) are calculated. Appearance description, display, and comparison are referred by table, diagram, figures, etc. in report.

The order of stating findings starts from the most important objective and then questions and hypotheses (if there is) are answered one by one in proposal, respectively. Sometimes, researcher compares or writes the relationships in question form without having hypotheses. Anyway, sum of specific objectives equals to sum of questions and hypotheses. If there is not a hypothesis, it equals to total questions. It is to be noticed that chapter 4 is stated to answer to the question and objectives of a proposal. Therefore, researcher is seriously prohibited to bring personal ideas or results without documentation, and the interpreted ideas must be brought with documents in chapter 4 and 5 as analysis and suggestion form.

Differences in tables, diagrams, figure, in reporting results description

Comparison is in tables and figures in descriptive studies. Tables, diagrams, and figures are used as following to check the data.

1D tables are for very small contents and 2D tables are for mean comparative contents. Diagrams are proper to show higher than average level variables. These diagrams are drawn by Excel and SPSS software. Quantitative information is shown by histogram and multithreaded diagrams, and qualitative data are shown by drawings and circular diagrams. Drawing diagram in SPSS is as following:

Spss → Graphs → Bar .. → Simple → Define → Suitable Data to Right Desk → Category Axis → % → OK

It is better to use Excel software to draw diagram and word software to draw table.

B) Data analysis (calculation of p-value in answer to research hypotheses) in report

There are two types of hypotheses in proposal, without relationship is H_0 and with relationship is H_1 written base on researcher idea. This part starts in answering to hypotheses by calculation of p-value. If (p-value) is less than 0.05, variables have relationship, and if the correlation is above zero in this state, the relationship between two variables is direct. It means they go up and down together. Otherwise, they don't have relationship with each other (correlation=0) or their relationship is reverse (negative correlation).

Chapter 5 of thesis: discussion, suggestion, and conclusion

This part of report includes discussion and suggestion, logical and wise interpretation of the researcher by comparison of results is stated in chapter 4 as the mean validity, and interpretation depends on standard deviation. Lower standard deviation has higher validity and vice versa, more standard deviation leads to use other statistical indexes such as model and middle to interpret data. The comparison of results in chapter 4 with the stated result of other studies in chapter 2 is analyzed in this part. The principal point is that researcher analyzes the obtained results and prevent from general, undocumented, and particularly irrelevant statement from research. The result from this analysis is the abbreviation form of document conclusion and offering documented suggestions.

This part in quantitative and comparative studies is called “discussion” and in relative qualitative studies is called “conclusion”.

It is to be noticed that chaptering the report sometimes can increase to 6 chapter according to the researcher cognition, but proposal mostly divided to three parts of subject and importance, hypotheses, methodology, and budgeting.

Appendixes include various studying lists including questionnaires, authentication, extensive statistical results, and English abstract that are stated at the end.

Note about writing the references

The maximum usage of printed and electronic references is in the first step of writing proposal. Writing the used references in reports was mentioned previously in proposal writing step. Three methods of “Vancouver”, “Harvard”, and “APA” are used depending on the idea of the researcher to the sponsor organization about writing the references.

REFERENCES

- Ansari M., et al., 2007, Qualitative research methodology, Isfahan, Isfahan University of Medical Sciences.
Delvar A., 2004, methodology in psychology and educational sciences, Nashr-e-Virayesh publication
Mike Allen , (2009) , Quantitive Research in Communication , USA , Saga Publish.
Mohadesi J., 2015, methodologies, Nashr-e-Maruf express. Qom
Mouly,G.J.(1970).The science of educational research. London: Van Nostrand Reinhold.
Qorarolhekam, Vol. 5, p: 330
Sarmad Z., Bazargan A., Hejazi E., 2004, methodologies in Behavioral Sciences, Agah express.
Shams, A., Afrugh, S., 2014, non-teacher methodology, Andisheh-Guyah express.
Van Dallen.(1973) Understanding Educational Research. Four edition.
Vatanpour M., 2007, Alphabet of research in medical sciences, Qom, Qom University of Medical Sciences.
WHO, 1997, methodology in health system, translation by Esfandiyar Saadat, Sotudehmaram, et al., Tehran, Ministry of Health Research Medical Research.