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Reviewing the Quality of Master's Dissertations

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ABSTRACT: This article reviews the quality of research done at the master's level at the National Academy of Governance, Mongolia. It explains the concepts of theories regarding the evaluation of research, and analyses master's dissertations with the 16 criteria in seven categories. The overall analytical framework was based on the general criteria of credibility to define the quality of research, which was presented by Mårtensson et.al. (2016:597), as well as the questions to establish criteria that were used by Coughlan, Cronin, Ryan (2007:658) and CASP. The research result introduces subjects that research quality should focus upon to make better content, first and foremost being the internal accuracy of the research.

INTRODUCTION

In recent years research in the field of social science in Mongolian universities has tremendously increased and in a time when research work at the master's and doctor's level (graduate level) is giving emphasis on research methodology, issues concerning research quality are of importance. In fact, introducing Research Methodology in Social Sciences to master's and doctoral level students is a new and a very recent phenomenon in Mongolian universities. More specifically, teaching the research methodology was initiated at the National Academy of Governance (NAoG), just in 2008 and it has been ordered as a compulsory course for a post-graduate study in 2013 by the Ministry of Education, Culture, Science and Sports of Mongolia. Historically, our Academy has been an exemplary change agent for higher education in Mongolia in introducing new ideas to the country since the 1990s democratic social change. It was the institution that first introduced courses and programmes in the market economy, marketing, organisational changes and public administration in Mongolia. In terms of research methodology in social science, we were the initiators in Mongolia for introducing this subject as compulsory to master's and doctoral level studies as there was not any research methodology chapters in the submitted doctoral dissertations until 2018 and master's theses until 2014, and both lecturers and students struggle to write a research paper suited for international research journals.

But there are no studies so far on what is the quality level of graduate research practice since the introduction of research methodology a decade ago. The concern is if the research is conducted using the 'special' methodology similar to the segregated language that the scientific communism, a study of building communism scientifically, of the previous society used, it will be difficult for the research paper to be approved, and hard to communicate globally. Through this study, the researcher aims to address not only Mongolian public and academic community but also the international academic community for practical purpose. The reason is that if the guidelines and principles of the research methodology that is used by the scientific community worldwide is followed, it is more likely that the results of the research will be accurate and valid, and if not, there is a risk of spreading misinformation to

any society due to the misuse of methodology. Thus, **in order to find out what is the quality level of research work of graduating master's students is at**, the evaluation of some of the works has been addressed here. In order to achieve this goal, the theories and methods of scientists and researchers regarding the nature of the research was studied, and its overall conceptual framework was based on the general criteria of credibility to define the quality of research, which was presented by Mårtensson et al., as well as the questions to establish criteria that were used by Coughlan et al. and CASP. Within the framework of the selected criteria, the review or the evaluation of the research practice of master's students at the NAOG is presented. In the spring of the 2017-2018 academic year, of the 49 students who completed master's public administration and public management programme, 13 dissertations were evaluated.

THE NATURE OF RESEARCH AND RESEARCH QUALITY

It is important to note that research that has not followed the scientifically accepted methods, ethics, rules, and principles does not have the moral right to give society or individual persons true, accurate knowledge and facts, and scientific institutions regulate these issues with their own rules and procedures. This is a universal experience and we have no reason to not comply. As such many scientists, researchers, and scientific institutions use the above principles to answer the question of what research and science is, and to give definitions. Namely, Neuman (1997:2) says, "Research is a collection of methods which people use systematically to produce knowledge" and thus emphasizes that research is done in accepted and set ways. Rehearsing this idea, Baatartogtokh (2012:16) states that "Scientific research is an inquiry that is ruled by scientific methods" and emphasizes that research is conducted in methods that have a scientific basis. On the other hand, Mårtensson et al. give a more detailed definition of the two concepts of science and research. Specifically, they give the different definition:

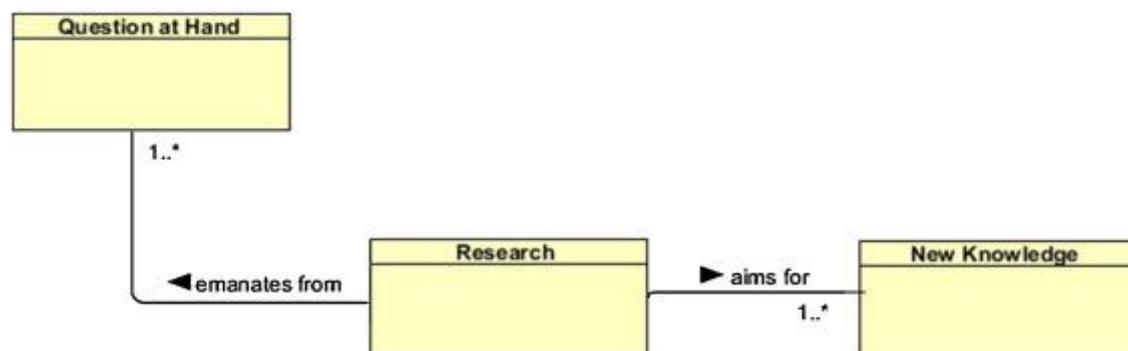
"Science contains a broader matter whereas research is the practical work of adhering to scientific principles. The result of a research practice is science"(Mårtensson, P., Fors, U., Wallin., S., Zander, U., Nilsson, G, 2016:594).

Researchers and research institutions have especially focused on a universal method of evaluating research quality and have developed guidelines and principles. When defining this concept, while Mertsens (Mertsens, 2015) says that evaluating research is to use a wide range of methods and measurements, Mårtensson et al. define it as "The practice of evaluation can be defined as an activity in which certain aspects of the quality of research practice are investigated" (2016:594). Some countries have created national guidelines in order to evaluate the quality of scientific research work. These usually highlight concepts such as the impact on and benefits towards science, technology, society, and economy, and the use of research results in society, whereas it is common for universities to create their own measurements. For instance, Mårtensson et al. (2016:594) write that each research institution in Sweden has its own guidelines on evaluating research quality.

There are models and standards for evaluating research quality, creating a standard,

and an answer to the question of what good research is. For example, the previously mentioned Swedish scientists Mårtensson, Fors, Wallen and others (2016, p. 596) developed a general model for evaluating research quality that is suited to many fields. According to them, when conducting research to create new knowledge, the **research question** decides the design and methods that will be used to carry out the research, and the research quality depends on how rigorously the researchers followed research methods and steps. The theories used in the research can be seen as 'maps' and research methods as 'nets'. Thus, according to their definition, and as shown in Figure-1, "the lower part of the research stems from the research question, and the upper part contains the goal of creating new knowledge" and if a work does not have a research question or a goal to create new knowledge, it is not a research work. This definition is unique in that it combines the definitions of many researchers and scientists.

Figure 1. What is research?



Source: Mårtensson et al. 2016:597

In order to determine if research is conducted with quality, it is considered important to analyse if it has credibility and integrity (Coughlan, et al. 2007; Mårtensson, et al. 2016; Vance, et al. 2013). Now the question of what requirements need to be followed in order to ensure that these two criteria are met arises. This will be discussed in the following section.

THE CONCEPT OF MEASURING THE RESEARCH QUALITY

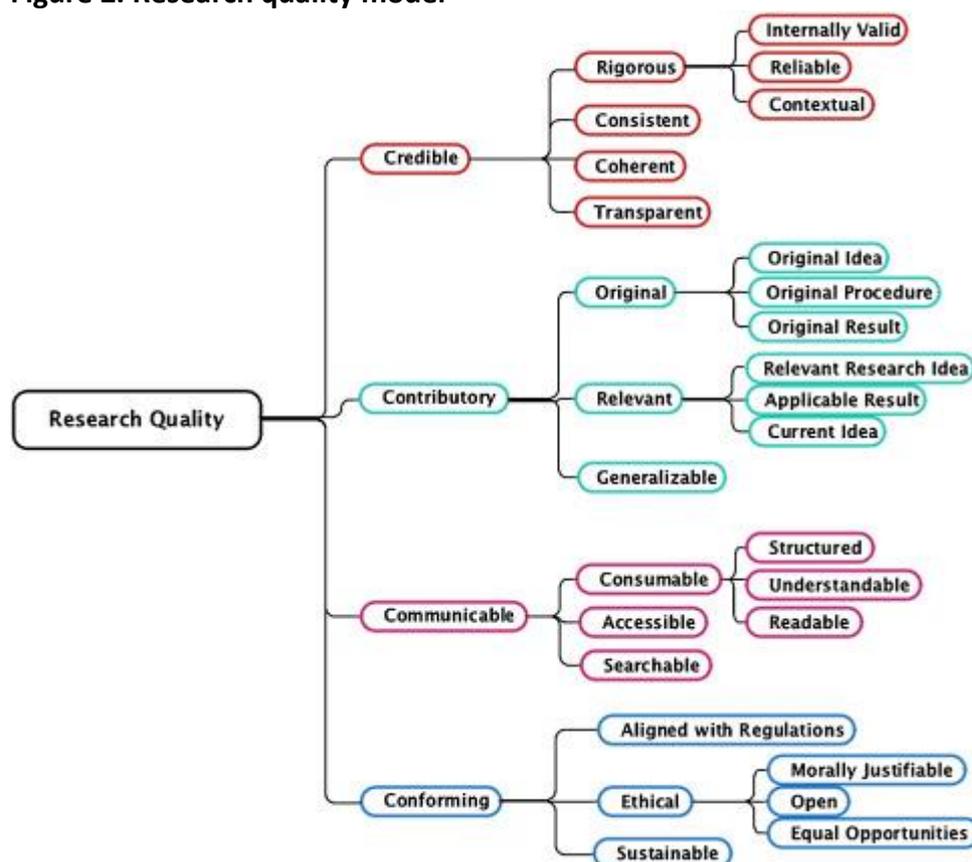
Researchers emphasize that if research is conducted with credibility and integrity, its quality is safely met. According to Coughlan, Cronin, and Ryan (2007:658) in order to evaluate whether these two requirements are safely met when conducting quantitative research, the critic must ask questions regarding the research work and identify what steps were taken during the research process. That is, questions to establish credibility lean towards how much the research has been conducted in a credible manner. However, evaluating whether or not the research has integrity depends on determining if during the research process its procedures were followed rigorously. As such, it is seen that determining a research study's trustworthiness and practicality is helpful in establishing its integrity. The previously mentioned Mårtensson and others developed a general multidisciplinary approach for assessing research practice and quality. This model established 32 common concepts that are used in the research process, shows their interdependence and out of these

concepts, differentiates four main ones that relate to many academic research fields and ordered them in succession. They believe that these concepts can be used to determine the quality of research. These researchers proposed a detailed definition of research, basing it upon their own model. They thus emphasized

"Research is a Conscious Action that aims for New Knowledge, emanates from one or several Questions at Hand, studies one or several Contexts, builds upon Existing Knowledge, uses one or several Scientific Methods, is documented in one Described Procedure, requires Transparency and relates to one or several Systems of Rules" (Mårtensson, et al. 2016:597).

Following this model, four main criteria were developed: 'Credible', 'Contributory', 'Communicable', and 'Conforming'. These models are shown in Figure 2 below.

Figure 2. Research quality model



Source: quality model by (Mårtensson, P., Fors, U., Wallin., S., Zander, U., Nilsson, G, 2016, p. 598)

The figure above shows the concepts that belong to the four main criteria. Specifically, at the top of the model, there are seven concepts that belong to 'Credible'. To be credible is to be coherent, consistent, rigorous and transparent. In order for research to be 'Contributory', the research question raised has to be original, and the new knowledge being researched must contain practical benefits for both theory and application. 'Communicable' research has a correct structure, is understandable, unchallenging to read, and explains the research process and new knowledge according to the procedure and with supporting evidence. 'Conforming' research is research that meets and rigorously follows ethical and legal principles.

However, for evaluating the research practice of master's students, we are not aiming to comprehensively explain these four main criteria, but will only focus on and explain the criteria 'Credible'. This is due to the fact that in the master's work we will be analysing, it was deemed satisfactory for the dissertation to have fulfilled the first criteria for assessing research quality, and that the three remaining criteria can be used to assess the quality of research done at the doctorate level or higher. Thus Table-1 will present and explain the concepts that belong to these criteria.

Table 1. Definitions of Concepts related to the criteria 'Credible'

| Terminology | Definition |
|------------------|---|
| Rigorous | Research that is Contextual, Internally Valid and Reliable |
| Internally valid | A Correct Scientific Method (incl. research design) is used in relation to the Question and Context and a new Knowledge is provable. |
| Reliable | The chosen Scientific Method is appropriate for the Question and Context, and is documented in a Described Procedure that others could use to reach a similar result in the same Context. |
| Contextual | Existing Knowledge that is relevant to the Context is used, and is presented according to Rules for Description. |
| Consistent | New Knowledge is logically linked to Existing Knowledge and is in accordance with the Scientific Method and Question at Hand. |
| Coherent | Adequate Consideration is given to the Existing Knowledge in the chosen Context. |
| Transparent | Relevant New Knowledge in the reporting of research results is included and the process is described in relation to the Question at Hand, Scientific Method and Existing Knowledge. |

Source: (Mårtensson, P., Fors, U., Wallin., S., Zander, U., Nilsson, G, 2016, *xyyð*. 597)

As seen from the table, in order to meet the requirements for the criteria 'Credible', the claim that is being made after research must have a strong basis and be supported by plausible arguments. In order to meet the requirements of Mårtensson's et al. (2016) theoretical model to assess the research quality of these master's dissertations, it was useful to apply Coughlan, Cronin, and Ryan's (2007) proposed questions to critique quantitative research, as well as that of the criteria known as CASP (critical appraisal skills programme), which provides a systematic assessment of descriptive research. CASP, also known as critical appraisal skills programme, is the general model that is used to evaluate descriptive research. These are based on 10 main questions and sub-questions, and its research design, gathering data, performing analysis, and determine if the results are accurate and understandable are ways to ascertain if research is internally consistent.

By explaining the theoretical concept of evaluating research quality, the CASP, the research quality principle of Coughlan, Cronin, and Ryan (2007:658) as well as that of Mårtensson and others' (2016:597), we are forming the basis for analysing the master's dissertations in the next section. Thus, the next section presents the questions and analysis used to evaluate the research work of master's students, which was based upon the theories and concepts of the previously mentioned researchers.

EVALUATION PROCESS OF THE QUALITY OF MASTER'S DISSERTATIONS

A. The basis for establishing the criteria for assessing the research quality

For this research, 13 of the 49 dissertations written by master's graduates in public

administration and public management in the spring of 2017-2018 academic year were collected for assessment by convenience sampling. The author was a member of the Defence Committee and later received permission to evaluate these works. Each dissertation was between 54-65 pages. For the purpose of analysis, the 16 criteria within seven categories were developed within the framework of the general criteria of credibility to define the quality of research (Refer to Table-2), which was presented by Mårtensson et al. (2016), as well as the assessment questions developed by Coughlan, Cronin, Ryan (2007), and CASP in relation to the General Guidelines for master's students of the NAoG (2016).

Table 2. Criteria for assessing research quality

| No | Categories and criteria | Questions used for assessment |
|----|---|--|
| 1 | Internally valid: Research design | 1. Research Problem Is the problem clearly identified? In what ways? - is it linked to the existing knowledge, or is identified from a gap in knowledge?; -is it based on cases and facts? |
| | | 2. Research purpose and question(s) - Are the research purpose and the question(s) logically related to the problem and the context? - What is the type of research question? |
| | | 3. Research approach and the methods used. - Is the research approach used in the research design (qualitative, quantitative or mixed) appropriately chosen in relation to the problem addressed and the type of research question? - Is the type of study (exploratory, descriptive, or explanatory) applicably selected? - Are the methods employed justified or explained? |
| 2 | Coherent and consistent: Theoretical basis | 4. Literature review Use of existing knowledge: 1. Is the literature review logically organized? Is adequate consideration given to existing knowledge? 2. Is the review recorded in a listed manner? 3. Is the review compared and synthesized? 4. Does the review reveal a gap in knowledge in that sector? |
| | | 5. Conceptual framework -How is the new knowledge linked to the existing knowledge? -Are the concepts in the conceptual framework explained? |
| | | 6. Hypothesis /if any/ If a hypothesis is identified: - Is the hypothesis testable and consistent with the conceptual framework? -Are the concepts measurable with variables? |
| 3 | Reliable: Methodology employed | 7. Sample -What is the sampling method? -Are the sampling steps clearly described? -Is the sampling described de facto used in the study? |
| | | 8. Method used for data collection -Are the chosen methods justified? -Is the preparatory procedure clearly explained? |
| | | 9. Definitions of concepts and terms Operational definitions: -Are the terms and concepts in the study clearly defined? |
| 4 | Transparent: Data analysis | 10. Analysis 1. For Quantitative study: -What type of data and statistical analysis was undertaken? Was it appropriate? Significance of findings? 2. For Qualitative study: - Are the methods of analysis used systematically and clearly described? -Are the findings credible and supported by evidence? |
| | | 11. Reliability and validity 1. For Quantitative study: -Were reliability and validity testing undertaken and the results discussed? 2. For Qualitative study: -Is the research design defensible and trustworthy and linked to the research questions? How is the trustworthiness reached? |

| | | | |
|---|---|--|---|
| 5 | Internally valid and transparent: Research results and conclusion | 12. Results and findings | -Are the findings logically related to the data and analysis? |
| | | 13. Discussion and conclusion | -Are the results discussed linked back to the literature review, or conceptual framework, - Are the research questions and hypothesis identified? -Is the study generalizable? If not why? |
| | | 14. Limitations of the study and further recommendations | -What kind of limitations of the study (e.g. in terms of design, data, sampling, methods, factors, analysis and results) are present? -What are the further recommendations following the limitations? |
| 6 | Transparent: Research ethics | 15. Observation of the ethical principles | -Are there any explanations regarding ethical issues (e.g. consent sheet for interviews, anonymity, confidentiality and researcher's ethics?) |
| 7 | Sources | 16. Use of references and sources | -Were all the books, reports and journals referred to in the study accurately referenced? |

The next section will describe the evaluation process of the thirteen research works, based upon the above (see Table 3) criteria.

B. The methods of the evaluation

Over the past 10 years of research methodology in social sciences being taught at the NAOG, this study is conducted to evaluate the dissertations of master's graduates and to assess the quality of their research practice. The first step in this process was to establish the conceptual framework that is identified in seven categories with sixteen criteria, each of which consists of the key questions.

For the purpose of the research ethical principles, the rights, and reputations of the collected sources were protected, and to prevent bias due to the fact that the researcher personally knows the academic supervisors and students, their names were concealed and were instead being referred to by the codes RW1-RW13 (research work 1, research work 13), and these codes were strictly enforced until the end of the summing up of the results and in the writing of this report.

The research works were analysed as to whether or not they had sufficient evidence to meet each criterion in Table-2. If there was evidence (+) was used and if there was no evidence (-) was used. If the evidence did not meet the requirements fully (+-) was used. Evidence was taken from the respective source and documented in Excel. (It is in Mongolian and can be obtained from the author).

Of the 13 works, nine were identified as being conducted in quantitative research design, two as qualitative, and two as mixed. In terms of the purpose of the study (Neuman, 1997:18-22; Babbie, 1994:84-86), three were mainly in the descriptive classification, six in quantitative explanatory, and two in qualitative descriptive. In order to meet the 'trustworthy' requirement for analysis, the process of how the criteria were established, and how they were used to evaluate research work was overseen by a colleague in the research methodology of the public administration class team. We discussed and agreed upon which criteria could be applicable in

these cases, and pieces of evidence from the dissertations for the criteria a researcher was hesitant about were debated until mutual agreement.

The next section describes how the results were evaluated by each of the 16 criteria.

C. The results of the evaluation

The master's dissertations were evaluated according to the criteria to see whether they met the criteria listed above and the final summary is presented in Table3 (see Table-3).

For the quality of research work, being internally valid is vital, and upon looking at the evaluation results, while the research works were the weakest in the category 'internally valid', the criterion in which the research problem was proposed met the criteria best. In other words, out of a total of 13 dissertations, 9 connected the problem with previous knowledge or used specific evidence and examples to demonstrate that the research problem is a matter that should be researched. For example, the research problem of RW1 is based on previous knowledge: founding it upon Hans Eysenck's theory that defining the temperament of employees and distributing them correctly is the basis for company profit and noting that there is a lack of research that studied the correlation between the temperament of civil servants and their productivity in Mongolia, and explains that testing this theory became the basis for this research. There were 3 research works that failed to accurately define the research problem. Namely, while RW5 defined its research problem as "There is an increased need to study and compare the socioeconomic state of the residents in each of Ulaanbaatar's districts", and had an emphasis on poverty instead of explaining why there is a need to compare the districts. Thus, as there is no evidence to support the problem, there is no clear connection to poverty. On the other hand, when looking at the main components of meeting the criteria for internal validation, which is whether the design justifies the methods used to answer the research question, whether a design conforms to the methodology, and whether the research type fits the research design, most (between 10-11 works) did not meet the requirements. For example, in RW2, while the research design is not clear, the descriptive research question "How are the state organizations developing and utilizing employment specifications for their operations" proposed indicates it is qualitative research. However, while the research methodology chapter writes that the sources of the data are documents, during the analysis there were inconsistencies regarding whether or not an interview was conducted. Generally, stemming from a lack of understanding about what type of research work is being done, it is common to state that multiple research methods are used, or the hypothesis is drawn from descriptive research where none is needed seems common. For example, it is unclear what type of research RW3 is, but the data used were documents and reports, and while the analysis appeared to be descriptive, the methods used was written as interviews or statistics, and a hypothesis indicate explanatory research was used. In this work, the concept of the research was written as being based on the concept of sustainable natural development, but how the research connected to this concept was unclear, and in the conclusion, there was no

Table 3. Summary of the results from evaluating master's research quality

| № | Categories | Criteria | Questions to assess | Criteria met | Criteria not met | Criteria half met | Comments |
|---|---|--|--|--------------|------------------|-------------------|---|
| 1 | Internally valid: Research design | 1. Research Problem | Is the problem clearly identified? In what ways? - is it linked to the existing knowledge, or is identified from a gap in knowledge?; -is it based on cases and facts? | 9 | 3 | 1 | |
| | | 2. Research purpose and question(s) | - Are the research purpose and the question(s) logically related to the problem and the context? - What is the type of research question? | 2 | 10 | 1 | |
| | | 3. Research approach and the methods used. | - Is the research approach used in the research design (qualitative, quantitative or mixed) appropriately chosen in relation to the problem addressed and the type of research question? - Is the type of study (exploratory, descriptive, or explanatory) applicably selected? - Are the methods employed justified or explained? | 2 | 11 | | Design rarely justifies the methods used to answer the research question. |
| 2 | Coherent and consistent: Theoretical basis | 4. Literature review | Use of existing knowledge: 1. Is the literature review logically organized? Is adequate consideration given to existing knowledge? 2. Is the review recorded in a listed manner? 3. Is the review compared and synthesized? 4. Does the review reveal a gap in knowledge in that sector? | | | 13 | All 13 dissertations did not compare or classify the existing knowledge and the sources, and did not analyse the differences between previous theories and research. Only list of theories |
| | | 5. Conceptual framework | -How is the new knowledge linked to the existing knowledge? -Are the concepts in the conceptual framework explained? | 1 | 7 | 5 | It did not understand that the conceptual framework is the theory which directs the whole study, but wrote it as a 'symbolic' subchapter (7 works), and did not use it as a way to explain the research results or to tie the entire research together. |
| | | 6. Hypothesis /if any/ | If a hypothesis is identified: - Is the hypothesis testable and consistent with the conceptual framework? -Are the concepts measurable with variables? | 2 | 2 | 6 | The definitions for the variable, and its supporting indicators were not clear and not operationalized. |
| 3 | Reliable: Methodology employed | 7. Sample | -What is the sampling method? -Are the sampling steps clearly described? -Is the sampling described de facto used in the study? | 8 | 2 | 3 | Sampling criteria of interview participants are not clear. |
| | | 8. Method used for data collection | -Are the chosen methods justified? -Is the preparatory procedure clearly explained? | 8 | 2 | 3 | While these examples and methods used the questionnaire method, it was common for the works to not specify how they developed the questions, and whether or not it was based on operationalization. |
| | | 9. Definitions of concepts and terms | Operational definitions: -Are the terms and concepts in the study clearly defined? | 5 | 7 | 1 | Definitions of concepts and terms are not sufficient. |

| | | | | | | | |
|---|--|--|---|---|----|---|--|
| 4 | Transparent: Data analysis | 10. Data Analysis | 1. For Quantitative study: -What type of data and statistical analysis was undertaken? Was it appropriate? Significance of findings? 2. For Qualitative study: - Are the methods of analysis used systematically and clearly described? -Are the findings credible and supported by evidence? | 4 | 4 | 5 | The analysis of quantitative data is mainly done within descriptive statistics and correlations. No analysis of interviews. |
| | | 11. Reliability and validity | 1. For Quantitative study: -Were reliability and validity testing undertaken and the results discussed? 2. For Qualitative study: -Is the research design defensible and trustworthy and linked to the research questions? How is the trustworthiness reached? | | 11 | 2 | Only two works undertook the reliability testing which was a progressive step forward; the other works did neither reliability no validity at all. |
| 5 | Internally valid and transparent: Research results and conclusion | 12. Results and findings | -Are the findings logically related to the data and analysis? | 4 | 5 | 4 | There are works that say that 'proved hypothesis based on document reviews.' |
| | | 13. Discussion and conclusion | -Are the results discussed linked back to the literature review, or conceptual framework. -Are the research questions and hypothesis identified? -Is the study generalizable? If not why? | 1 | 12 | | The results did not link back to the literature review, or conceptual framework, the research questions and hypothesis were identified |
| | | 14. Limitations of the study and further recommendations | -What kind of limitations of the study (e.g. in terms of design, data, sampling, methods, factors, analysis and results) are present? -What are the further recommendations following the limitations? | 7 | 5 | 1 | There was a lopsided tendency to repeatedly describe how they selected the sample. |
| 6 | Transparent: Research ethics | 15. Observation of the ethical principles | -Are there any explanations regarding ethical issues (e.g. consent sheet for interviews, anonymity, confidentiality and researcher's ethics?) | | 13 | | Out of all of the dissertations, there was not one sentence that stated that the researcher followed the ethical principles of research, showing that dissertations failed to meet this requirement. |
| 7 | Sources | 16. Use of references and sources | -Were all the books, reports and journals referred to in the study accurately referenced? | 3 | 6 | 4 | It was also common for the used sources in the literature review to not contain in the bibliography. |

explanation connecting this concept to the research. Also, statistical analysis was not conducted and instead used the numbers from a ready report, and concluded that the hypothesis was proven despite not verifying the claim, and while claiming that a quality interview was conducted there was no proof of this data analysis. These are all examples of dissertations that are not internally valid.

Important things to assess when evaluating research quality are coherency and consistency. Within the framework, it was noted that it was common for the entirety of the research to have met this criterion moderately and that there was a tendency to approximate previous knowledge in a listed manner in order to connect it to the problem. To be more exact, all 13 dissertations did not compare or classify the existing knowledge and sources, and did not analyse the differences between previous theories and research. For example, in RW12 there was a concept known as "social welfare". When writing about this concept, six concepts (the Asian Development Bank, the International Labour Organisation, the International Monetary fund, the Mongolian Law on Social Welfare and concepts of Russian and Mongolian scientists) were just listed. However, it did not specify or examine what these definitions had in common, what ideas differed, and which ones are held more in Mongolia and simply recited them. It did not understand that the conceptual framework is the theory which directs the whole study, but wrote it as a 'symbolic' subchapter (7 works), and did not use it as a way to explain the research results or to tie the entire research together. As an illustration, RW12 stated its conceptual framework was the "implementation level of food and nutrition support services applied the 3-sided policy of social welfare", and wrote that it "used honest, beneficial, labor supportive policies", but it did not explain how it will guide, why these policies were used as a basis and in the summary and conclusion wrote only one sentence saying "the work was done with an emphasis on the 3 sided policy of social welfare services", and did not state how these 3 policies were adequately applied in the research. In regards to conducting quantitative explanatory research, the definitions of the variable and its supporting indicators were not clear and not operationalized.

The next important criterion for research is reliability. This concept comprises of how the data was collected (by interview, experiment, observation or questionnaire), how they developed the research methodology they will be using (state the instrument they used, or if they developed it themselves, then state what steps they took), accuracy and reliability, explaining and verifying the research procedures, and setting the context for how other people with a similar context can reach the same conclusion by using the methods used in the research. Within the framework of this criterion and the works that were evaluated, there are 8 research works that explained the steps of how they selected the sample. However, none of the works that used interviews mention how they made a sample of the participants of the research. There were 8 works that explained the research methods of how they gathered the data. However, while these examples and methods used the questionnaire method, it was common for the works to not specify how they developed the questions, and whether or not it was based on operationalization. While more than half of the total dissertations met the aforementioned two

requirements for reliability, there were 7 works that did not have sufficient operationalization for the indicators and the variables that are defined by them. Aside from this, no basis or definitions of the indicators were made.

Research transparency lies in connecting and relating the research question, research methods and existing knowledge to the new knowledge that was acquired as the result of the research, and explaining the research process openly and thoroughly. With this problem, criteria aside from research limitations were not met adequately. Of the total dissertations, 7 met the requirements, but there was a lopsided tendency to repeatedly describe how they selected the sample. In quantitative explanatory research, only two, or namely RW1 and RW4, undertook the reliability testing, which was a progressive step forward; the other works did neither reliability nor validity at all. Out of all of the dissertations, there was not one sentence that stated that the researcher followed the ethical principles of research, showing that dissertations failed to meet this requirement.

In conclusion, there was only one dissertation that met the discussion and conclusion requirements. In the remaining dissertations, the conclusions were restricted to stating that the hypothesis was proven and did not explain the entire research results within a theoretical and conceptual framework, and did not give a coherent explanation of how the hypotheses answered the question, and whether it is possible to generally relate the result to a greater set of population, and if not, there was no explanation why. It was also common for the used sources in the literature review to not contain in the bibliography.

CONCLUSION AND RECOMMENDATIONS

Over the last years in Mongolian universities, especially in the social sciences field, the research practice is progressively enhancing while emphasizing on the importance of research methodology, and there is an increased focus on the research practice of degree students. However, the point is not in the amount of research we produce, but in the quality of the research practice. The research cases studied shows that it is important to ensure the quality of students' research practice to the next level, and to carefully focus on whether or not scientific critical principles are being rigorously followed in research.

This study aimed to answer the question of what the quality level of master's research practice at the National Academy of Governance is. In the span of ten years, after the NAOG began teaching and introducing quantitative and qualitative research methodology in social science at a level that is accepted at universities worldwide, it is very progressive that in the present day the format and the structure of the research work of master's students in public administration and business administration are becoming more and more acceptable.

However, in terms of the content and quality, as of today, out of the 13 dissertations that were evaluated, only three met at least a half of the 16 criteria in the seven categories. Out of these, it was evaluated that RW1 fully met four criteria and a half of three criteria, and thus adequately met the requirements of seven criteria, RW4

fully met eight criteria and half of the three criteria, and thus adequately met 11 criteria, and RW8 fully met 11 criteria.

Looking at these results, it shows that it is time to focus more on the credibility of the content of research practice, despite the fact that the results of this research are valid only for these cases sampled but cannot be generalised to all master's students at Naog. While the form and format of the master's work are adequate, the content of the majority of the cases does not meet the requirements, and shows that the observance of the internal validity, reliability, transparency, coherence and consistence are still lagging behind a great deal.

Thus, when evaluating student research work during the defence committee meeting it is extremely one-sided to only discuss how the data was analysed, and what results were found (it is pointless to discuss it if it did not follow research methodology and thus has incorrect, inaccurate results). Instead, it is important to discuss the credibility and integrity of the research before moving to the results and findings, then the chances of further findings being accurate and truthful increase. In other terms, as a tree without roots does not grow, aside from the fact that research without a basis has no further benefits, and has the danger of misinforming people and society, it becomes an obstacle to the development of Mongolian education and research. It is worthy to think over the words of Kenneth Boulding (1941):

"Theories without facts may be barren, but facts without theories are meaningless. It is only "theory"- i.e., a body of principles - which enables us to approach the bewildering complexity and chaos of fact, select the facts significant for our purposes, and interpret the significance. "

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