DEMAND AND USE OF NVIVO SOFTWARE IN EDUCATION IN MONGOLIA

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ABSTRACT

This research aimed to define the use of NVivo software which makes a qualitative data analysis in education in Mongolia because it has been practiced newly over the last few years. It is probale that most researchers use greatly the softwares in quantitive data analysis such as SPSS, Stata and Access softwares in Mongolia while few people can work on the softwares in qualitative data analysis. Therefore, this topic was chosen and it was expected that will show some interesting results. The research sampling was selected total 260 students consist of 207 in bachelor's course, 27 in master's course and 27 students in doctorate course in Mongolian National University of Education (MNUE). The research methods were used data anaylisis in quantitive. The research finding shows that around 90-95 percent of students want to use the NVivo software and there was a huge demand, but an interesting finding has been observed that some bachelor's students generally answered 'No or Don't know' for question regarding demand and use of NVivo software. Also, it indicates that around 60-70 percent of students use to collect their research data the methods of interview, ovservation and content analysis, and they could not operate fully their research results because it needs to use any qualitative software.

Keywords: Use, NVivo software, Qualitative, Student, Mongolia

INTRODUCTION

Many qualitative researchers are interested in evaluating, interpreting and explaining social phenomena. They analyze data from interviews, surveys, field notes, web pages and journal articles, and they work in a range of sectors from social science and education to healthcare and business. It is designed to facilitate common qualitative techniques for organizing, analyzing and sharing data-no matter what method you use (QSR International Pty Ltd, 2016). Researchers usually adopt a qualitative methodology to suit their research question. For example, a social scientist wanting to develop new concepts or hypotheses may take a 'grounded theory' approach. NVivo allows researchers to organize and analyze a wide variety of data, including but not limited to documents, images, audio, video, questionnaires and social media content (Bengt & Allan, 2015). Managing and analyzing qualitative data can be a trying experience, particularly for novice researchers who tend to see their data from a single perspective (Noriah and Abu, 2012). Qualitative data analysis uses a process of reduction to manage and classify data. In this process, units of text are first de-contextualised by removing them form their source with their meaning intact and then re-contextualised by drawing from them a more robust, context independent, meaning based on an accumulation of evidence (Jones, 2007).

In Mongolia, the number of qualitative researchers has been increasing rapidly nowadays in regards to the educational policy and social development. However, it is unlikely that wheter

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they use any qualitative software to analyze their data, thus the research aimed to study it by some students in MNUE.

On the other hand, research valuable is to study chance and condition of NVivo software is practiced fully in MNUE in education. It will be probable that has a considerable impact on research development result in so many young researchers will use it for their projects in the future.

DATA COLLECTION AND METHOD

Demand and use of NVivo software in education have been studied using questionnaire and content analysis as their data collection instruments (Batbold et al., 2017). Total 260 students in bachelor, master and doctorate course in MNUE have formed the questionnaire and their professions were 15 differences. The questionnaire has two parts: general information and main questions which were yes or no response and multiple choices. And we have collected some quantitative information from a yearbook (Mongolian Statistical Yearbook, 2016) and a report of educational statistics 2016 to 2017 (Ministry of Education, Culture, Science and Sports, 2017).

This research finding has been calculated by SPSS.22 software such as descriptive statistics, frequencies, cross tabulations, standard deviation and statistical significance (Batbold et al., 2018). Also, it was used a method of content analysis to work on the documents.

LEARNERS IN EDUCATION IN MONGOLIA

In Mongolia, total 157138 students are learning at academic year from 2016 to 2017 in domestic universities and colleges by all professions, hence 22006 students are learning by education studies and pedagogy.[ii] In 2017, total 13131 students are learning in MNUE.[iii]

In this research, total 260 students have been involved by questionnaire method and let's consider some findings in their general information.

Table 1. Descriptive Statistics

	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Student's age	254	18	45	21.96	4.93
Unvalid N	6				

Above table indicates that descriptive statistics of student's age, particularly, mean age was around 22 and standard deviation was 4.93 are normal level.

Table 2. Student's course

	Frequency	*Percent*	*Valid Percent*
Bachelor	206	79.2	79.2%
Master	27	10.4	104%
Doctorate	27	10.4	10.4%
Total	260	100.0	100 %

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Graduate students were 206 and around 80 percent while postgraduate students were 54 and around 20 percent, and valid percent was 100 (Table 2).

DEMAND AND USE OF NVIVO SOFTWARE IN EDUCATION

MNUE has been chosen as an example of educational branch in Mongolia to our research object because there learns around 22 thousands studends by teaching profession and educational studies. Therefore, we have selected MNUE as it perhaps represents fully the educational branch in Mongolia.

Some specific findings have been chosen by our research from students' responses and these are follows.

Table 3. Demand of NVivo software for qualitative data analysis

	Yes	*No*	*Don't know*	*Total*
Bachelor	178	14	14	206
Master	26	0	1	27
Doctorate	26	0	1	27
Total	230	14	16	260

Around 88 percent of total students responded 'Yes', but others selected 'No or Don't know' and it was around 12 percent. An interesting finding has been observed that some bachelor's students answered 'No or Don't know' for question regarding demand of NVivo software, but master and doctorate students generally answered 'Yes' for this (Table 3).

Table 4. Interest of students if NVivo software in qualitative data analysis is practiced in training

	Yes	*No*	*Don't know*	*Total*
Bachelor	189	8	9	206
Master	27	0	0	27
Doctorate	27	0	0	27
Total	243	8	9	260

In this case, it has been observed that the number of bachelor's students has increased to 'Yes' response compared with Table 3. Specially, their interest is more if NVivo software in qualitative data analysis is practiced in training. And postgraduate students usually want to use NVivo software is shown by Table 4.

Table 5. How importance for students if NVivo software in qualitative data analysis is practiced in training

	Very important	*Important*	*Not important*	*Don't know*	*Total*
Bachelor	68	119	1	18	206
Master	9	18	0	0	27
Doctorate	17	10	0	0	27
Total	94	147	1	18	260

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In Table 5, around 36 percent is 'Very important', 57 percent is 'Important' and 7 percent is 'Don't know' were responded by students in three different courses. Also, some bachelor's students answered 'Don't know' for how importance if NVivo software in qualitative data analysis is practiced in training.
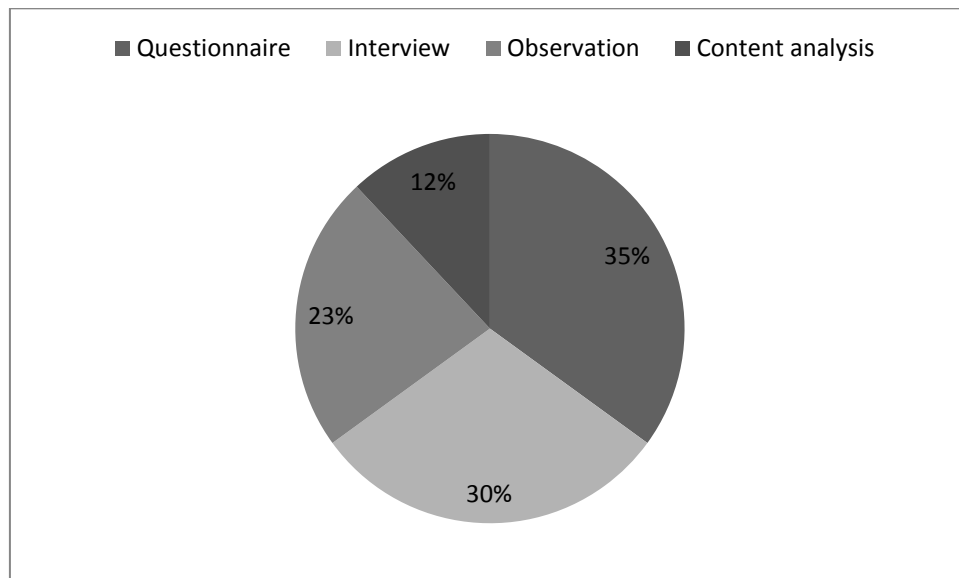

Figure 1. Students use to collect data these methods

In this figure, around 60-70 percent of students use to collect their research data qualitative methods of interview, observation and content analysis, and 30-40 percent of them use quantitative method. It reveals that students have to use NVivo software to analyze their data in MNUE.

CONCLUSION

The number of qualitative researchers has been growing rapidly in education in Mongolia for last few years result in demand and use of NVivo software have been increased these days. It may appear that few people can analyze their research data on NVivo, but others don't use it. Therefore, we have studied providing demand and use of NVivo and have the following results.

This research sampling has included 18 to 45 aged learners who are 206 bachelor, 27 master and 27 doctorate students in MNUE. Some bachelor's students prefer to learn NVivo software in the future because they are initial learners for research methodology. However, master and doctorate students want to use fully it for their research because they will become advanced researchers in few years.

In the research result, most students use to collect their research data qualitative methods of interview, observation and content analysis while others use quantitative method. Therefore, they should use a wide spread with NVivo software to analyze qualitative data.

Finally, we hope that so many researchers will work on qualitative data with NVivo in Mongolia and it will be practiced fully in short-time in all branches.

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REFERENCES

[1]   Batbold, T., Ariunaa, D., Bayarmaa, B., Battsetseg, S., Zol-Erdene, D. (2017). *Research methodology.* Ulaanbaatar: Soyombo Print

[2]   Batbold, T., Ariunaa, D., Bayarmaa, B., Battsetseg, S., Zol-Erdene, D. (2018). *Research methodology.* Ulaanbaatar: Soyombo Print.

[3]   Bengt, M. E., & Allan,G. M. (2015). *Nvivo 11 essentials.* Stockholm: Kunscub.

[4]   Jones, M. L. (2007). Using software to analyse qualitative data. *Journal of Qualitative Research*, *1*(1), 64-76.

[5]   Ministry of Education, Culture, Science and Sports. (2017). *Report of educational statistics 2016 to 2017.* Ulaanbaatar: Ministry of Education, Culture, Science and Sports.

[6]   National Statistics Office of Mongolia. (2016). *Mongolian statistical yearbook.* Ulaanbaatar: National Statistics Office of Mongolia.

[7]   Noriah, M. I., and Abu, Y. B. (2012). Qualitative data management and analysis using NVivo:An approach used to examine leadership qualities among student leaders. *Education Research Journal, 2*(3), 94-103.

[8]   QSR International Pty Ltd. (2016). *Nvivo 11 getting started guide.* Mongolia: QSR International Pty Ltd.

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