Content Analysis of Educational Master Theses Conducted in University of Nizwa Between the Years of 2009-2016

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Abstract: This research is a qualitative study using content analysis as a method to examine the educational theses in the University of Nizwa in Oman. A table included the determined variables was developed by the researchers to code the raw data of the educational theses in two Masters (Psychological Guidance and Counseling Master and Educational Administration Master). Content analysis interpreted the data by providing descriptive data of the percentages and frequencies of the proportions of themes in the theses. The results of the study revealed that a number of these theses were supervised by faculty that most of them were assistant professors and non-majored in teaching master students and there was an equal gender representation in the terms of gender distribution of theses. Moreover, the results showed that there is a limit of variety on the themes and a domination of the descriptive method using questionnaire as the main and only tool of collecting data with the focus on K-12 school body mostly conducted in Muscat and Aldakelyeh.

Key words: Content analysis, educational research, master theses, students, gender, data

INTRODUCTION

Scientific research is considered the primary engine of making changes and developing societies through generating new knowledge that ensure effective foundations to improve the various aspects of life which in turn improve human welfare of being able to control the circumstances of facts and draw better future (Hauser, 2013; Hasih and Shannon, 2005; Khodadoost et al., 2011; Obaidat et al., 1992, Pring, 2000). Scientific research could be defined as a systematic process to investigate facts and knowledge using the scientific bases for the solution of problems faced by mankind (Al-Smadi et al., 2017; Feyfant, 2005; Laflamme, 1993). Meanwhile, educational research deals with issues that are specifically related to the educational field to access scientific explanations for reasons (Al-Smadi et al., 2017; Anadon, 2004; Berry, 1998) and to develop educational solutions and applications.

Most of the educational research is basically conducted at the universities by faculties, graduate students or in the various centers of research. Universities encourage students in the field of education to be engaged in scientific research to enrich science and general knowledge of the educational issues that contribute in serving communities (Al’wad, 2013; Alebaikan and Alsemiri, 2016). Therefore, student’s dissertations and theses are considered an important resource of advancing knowledge and reliable scientific reference for researchers and they present a practical activity (Al-Shayeb, 2005; Berry, 1998; Komba, 2016; Vijayakumar and Vijayakumar, 2007) in which identifying and outlining in at the early stage the precise process of conducting a piece of educational research which improves researcher’s professional capabilities and skills.

Giving the fact of the importance of the educational research, educational dissertations and theses enrich students inquiry capabilities (Al-Habeb and Al-Mutke, 2014; Anadon, 2006; Yavuz, 2016) as they play an essential role in providing and improving the critical and reflective thinking of analysis which attributes in finding a good topic with applicable perspectives. Therefore, providing evidences regarding the various issues related to the educational dissertations and theses such as the ways of identifying and generating the topics of study which research methodology was used and which tools were utilized can provide access to information that can help in improving educational research (Alhojailan, 2012; Anonymous, 2008; Gartrell and Gartrell, 1996; Gross, 2013; Anonymous, 2009; Macarie-Florea et al., 2010).

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In related educational research literature in the Arab World concerning the quality of educational dissertations and theses, Al-Smadi et al. (2017) argued that educational graduate students are weak in generating appropriate research topics as well. Al-Habeeb and Al-Mutlik (2014) indicated that graduate students in the educational science reported low in choosing the suitable methodology; moreover, Al-Qarni (1998) and Yusof (2009) mentioned that graduate students conducted some unethical behaviors such as plagiarism, fabrication and falsification of data. Therefore, it became a necessity to review and examine the content of the educational dissertations and theses to present a feedback about their quality and their contribution to the improvement of education knowledge and practices.

Namely, content analysis was employed to present a strong case for reporting and interpreting the information that was collected from dissertations and theses in a possible manner to deliver a meaningful analysis as it presents the raw data in a qualitative manner to give a primary feedback of the characteristics that have been chosen (Aljadi, 2010; Bahet, 2003; Beker and Chware, 2015; Cetin, 2016; Durak et al., 2016; Feney, 2013; Ounasgeraa, 2013; Kozikoglu and Senemoglu, 2015, Randolph et al., 2012). Yet, because of the lack of study in this aspect in Arab World research and as a need for a basic evaluation, this research could be considered as a significant study by highlighting the strength and weakness points in the educational dissertations and theses content and suggesting critical solutions.

**Significance of the study:** The function of educational research is to generate knowledge and improve educational practice (Berry, 1998); therefore, investigation of issues related to the educational research is essential to provide significantly ongoing formative feedback. Moreover, the first three researchers of this study published a paper titled "Graduate Student’s Perception of Scientific Research Ethics in University of Nizwa" in 2017 to reveal the awareness of education master graduates toward research ethics while conducting their research, the results which indicated that the awareness level is moderate highlighted the need for further future investigation in this field.

Moreover, content analysis is a rarely-acknowledged and therefore poorly applied as a method of research by educational researchers in the Arab World in general and in Oman in specific, therefore the researchers of this study argue that it provides new techniques to understand data of the phenomenon under study as it illustrates the data in great details through the "systematic classification process of coding and identifying themes or patterns" (Hsieh and Shannon, 2005). Therefore, this research could be one of the significant changes in the Arab educational research which looking forward to investigate effectively its functions and also, this study is expected to contribute to the current international and regional literature.

**The research objectives and questions:** The purpose of this study is to investigate and analyze the content of educational master theses which have been conducted in the University of Nizwa between the years of 2009-2016. This study investigated and analyzed the main rubrics that frame the thesis framework according to the University of Nizwa. In addition, variables such as the year, researcher’s gender and advisor position have been taken in consideration because researchers found would be critical to be investigated. Mayring (2000) argues that in content analysis research questions must be clearly defined in advance must be theoretically linked to earlier research on the issue. Therefore, research design, population and sample, tools, methodology, references were investigated. Focusing more narrowly, this study addresses the following questions:

- What was the distribution of studies in terms of years?
- What was the distribution of studies regarding researcher’s gender?
- What was the distribution of studies regarding advisor’s positions?
- Which research methods were used?
- What were the ways used to choice samples?
- What were the sample’s properties?
- Which educational themes were studied?
- What was the distribution in terms of type of references?
- What was the distribution in terms of regions?
- Which data collection tools were used?

**MATERIALS AND METHODS**

This study is a qualitative approach used content analysis method to analyze educational master theses which were conducted in the University of Nizwa between the years 2009-2016. Qualitative approach is considered a way to gather an in depth meaning and understand of the available data, it goes beyond the explicit findings to seek the implicit understanding where it examines why and how instead of limit its interest on what or who.

Moreover, content analysis which is a method that generates qualitative data consists with the trend of the qualitative approach to draw interpretations which lead significantly to a communication potential of the available
data. According to Beck and Manuel (2008) content analysis is a way for “defining, measuring and analyzing both the substance and meaning of texts”. Content analysis is a flexible research method which aims to provide more meaningful interpretations of the raw data through coding systematically the analyzed materials to develop common descriptive patterns or classifications to understand the potential of any issue more widely (Alhojailan, 2012).

In this study, content analysis allowed the researchers to move beyond the general results of the data to achieve more specific and valuable level of descriptions and to reveal any hidden facts regarding the diverse aspects of educational master theses in the University of Nizwa. Generally, researchers convert data from qualitative into quantitative context where they present patterns and themes that relate to the data which were examined with frequencies and percentages.

Reliability and validity: The researchers developed a table that contained all the determined variables: year, researcher’s gender, advisor’s position and field of specialty, research design and method, number and properties of samples, subjects, data collection tools and themes. The consistency of the data obtained created the basis for ensuring validity and reliability. A total of 219 master theses were accessed by January 1st 2017 and which have been analyzed individually by the four researchers who used the prepared table. The tables were compared to identify the differences among the related educational theses and which were examined again.

Moreover, the comparison allowed obtaining common themes which strengthened the validity and reliability of the table that was used in this study. At this point, inter-rater reliability of the comparison round coding was \( k = 0.87 \) which is considered as very good extent of agreement for Cohen’s Kappa. Inter coder reliability is “the extent to which independent coders evaluate a characteristic of a message... and reach the same conclusion” (Lombard et al., 2002). Finally, for ensuring the interpretative validity, the researcher let other faculty members who supervise theses for graduate educational students to read the initial findings to give any feedback of incorrect representations.

The procedures: It was a little bit difficult task when the researchers started in searching for the educational theses in university of Nizwa. There have been about 75 downloaded theses on the website of the library of the university, that’s mean that most of the theses are missing. The researchers visited the library to search manually for the missing theses and they found about 125 on the roofs of the library. Moreover, the researchers contacted the coordinators of the department of education in the university to ask them whether they have any information about the missing theses. Unfortunately, the researchers didn’t get a lot of information, therefore, the researchers decided to ask the educational faculty whether any of them have a copy of the missing theses and they found about 14. At last procedure to collect the data, the researchers visited the office of the assistant dean for graduate studies to investigate whether there are any copies of the missing ones and found about 5.

Therefore, the sample of the theses was 219 which have been accessed by the researchers in just two majors of master in the subject of education (education administration and psychological guidance and counseling). Even though there are currently more than these two subjects of specialty in the education at the University of Nizwa such as master in curriculum and teaching methods and master in education for teaching Arabic to speakers of other languages but this study is limited to educational theses that were completed between 2009-2016 and that time there was theses in the two above mentioned Masters.

The four researchers identified the code of the data according to the common themes which have been investigated and applied to the obtained data and these themes were relevant with international literature review (Aljaji, 2010; Bahet, 2003; Bekar and Chiwane, 2015; Cetin, 2016; Durak et al., 2016; Feeney, 2013; Gunasekera, 2013; Kozioglu and Seremoglu, 2015; Randolph et al., 2012) and the key themes for this study were in most of the previous research results which were relevant to the current study. After developing the table of the themes of the study, there were about 219 theses that were included for coding of these, 110 theses were from the Psychological Guidance and Counseling field while 109 were from the education administration field.

There are some certain limitations to this study: the current study focused on specific method of qualitative research content analysis which aims to categorize the raw data for interpretation by developing a descriptive data such as percentages and frequencies to reach a conclusion and this could limit the comparison with other qualitative research methods that use an overlap of analysis and interpretation such as thematic analysis. Moreover, this study examined the educational theses in University of Nizwa and which have been written in Arabic language, the thing which may influence the applicable features in other contexts, therefore, generalization of the findings will not be encouraged to make.
Results and Discussion

The purpose of this study was to examine the educational theses in educational department in the University of Nizwa between the years of 2009-2016. This study was a qualitative approach providing descriptive data to address 8 research questions:

Q. 1: What was the distribution of theses in terms of years?: According to Table 1, the majority of the theses in terms of years in both Masters were in 2014 about (19%) each and there was a decrease of the number of theses in both Masters in the late 2 years (2015-2016) about (3-11%). The reason for this decrease could be explained with the fact that before the year 2014, all faculties in the education department were allowed to supervise graduate theses regardless their field of specialty (who were teaching BA degree in Special Education, Arts and Kindergarten) and who might not be qualified in the potential. The decrease in the late 2 years could also be explained due to the supervision restriction that took place in the department after 2014 to limit the supervision in a specialized manner.

What was the distribution of studies regarding researcher’s gender?: Table 2 presents a high percentage of equity in the distribution of theses in terms of gender, about (50%) in both Masters. This could be explained due to the movement of women empowerment in Oman, especially after the political reform in 1970 which introduced the educational goal “education for all” which motivates Omani women to continue education for graduate studies.

What was the distribution of studies regarding advisor’s positions?: Table 3 shows us that most of the theses have been supervised by Associate Professors and Assistant Professors in both Masters (95.4% in Educational Administration Master and 75.5% in Psychological Guidance and Counseling Master) and the number of theses which were supervised by Professors is about 24.5% in Psychological Guidance and Counseling Master, whereas 4.5% in educational administration. This result could be explained due to the total number of faculty in the educational department in general who were allowed to supervise and most of them were Assistant Professors who teach BA degree in Special Education, Arts and Kindergarten. Moreover, hiring Professors might not be in the top considerations of the university due to their high salary which permitted that Assistant Professors could supervise more than 5 graduate students a year in both Masters.

Which research methods were used?: Analysis of Table 4 shows that the majority of the methods used in the theses employed “descriptive method” and “correlation method” (99.1% in educational administration master and 64.6% in Psychological Guidance and Counseling Master) which reveals the widely employment of quantitative statistical tests. Even so, there was a thesis in the educational administration master mentioned the experimental method, the tool and the analysis were descriptive and using questionnaires and the use of quantitative statistical tests, the thing that indicates that the student didn’t have a clear perspective and understanding of the use of experimental method. This

| Table 1: The frequency and percentage of years of publication date of the theses |
|---------------------------------|-------------------------------|
| Educational administration | Psychological guidance and counseling |
| Years | Frequency | Percentage | Years | Frequency | Percentage |
| 2009 | 4 | 3.7 | 2009 | 8 | 7.3 |
| 2010 | 18 | 16.5 | 2010 | 14 | 12.7 |
| 2011 | 21 | 19.3 | 2011 | 18 | 16.4 |
| 2012 | 15 | 13.8 | 2012 | 12 | 10.9 |
| 2013 | 7 | 6.4 | 2013 | 27 | 24.5 |
| 2014 | 21 | 19.3 | 2014 | 21 | 19.1 |
| 2015 | 11 | 10.1 | 2015 | 6 | 5.5 |
| 2016 | 12 | 11.0 | 2016 | 4 | 3.6 |
| Total | 109 | 100.0 | Total | 110 | 100.0% |

| Table 2: The frequency and percentage of researcher’s gender distributions |
|---------------------------------|-------------------------------|
| Researcher’s gender | Female | Male |
| Frequency | 50 | 59 |
| Percentage | 45.9 | 54.1 |

| Table 3: The frequency and percentage of advisor’s positions |
|---------------------------------|-------------------------------|
| Advisor’s position | Frequency | Percentage | Advisor’s position | Frequency | Percentage |
| Professor | 5 | 4.6 | Professor | 27 | 24.5 |
| Associate | 2 | 1.8 | Associate | 50 | 45.5 |
| Professor | 102 | 93.6 | Professor | 33 | 30.0 |
| Total | 109 | 100.0 | Total | 110 | 100.0% |

| Table 4: The frequency and percentage of research methods that used in theses |
|---------------------------------|-------------------------------|
| Research method | Frequency | Percentage | Research method | Frequency | Percentage |
| Descriptive method | 99 | 90.8 | Descriptive method | 30 | 27.3 |
| Correlation method | 9 | 8.3 | Correlation method | 41 | 37.3 |
| Experimental method | 1 | 0.9 | Experimental method | 38 | 34.5 |
| Qualitative method | 0 | 0.0 | Qualitative method | 1 | 0.9 |
| Total | 109 | 100.0 | Total | 110 | 100.0% |
was not the case with Psychological Guidance and Counseling Master which gave more attention to the use of experimental method and qualitative method due to its nature.

**What were the ways used to choose samples?** Table 5 presents the percentages of the ways of choosing samples. Accordingly, 33.9% used the random sampling in the educational administration master whereas 36.4% in the Psychological Guidance and Counseling Master. Purposive sampling got the lowest percentage in the educational administration master (1.8%) whereas (10.0%) in the Psychological Guidance and Counseling Master. Regarding the unknown way of sampling (56.9%) and (36.4), Table 5 reveals a very serious case that the majority of students in both Masters didn’t clearly recognize the differences and the use of the suitable sample type. Moreover, there was confusion in using between random sampling and convenience sampling and most of the time it was a convenience sampling and even with the purposive sampling, students didn’t justify their choosing.

**What were the sample’s properties?** A closer look at Table 6 reveals that the most popular group in the educational administration master was from the school body (50.5% school administrators, 26.6% teachers and 4.6% students and 3.7% in the higher education institutions). Even so Table 6 shows that majority of participants in the Psychological Guidance and Counseling Master is school students, we can notice that there is more variety of participants in the Psychological Guidance and Counseling Master due to its nature of properties (school body, high education institutions, prisons, players).

**Which education themes were studied?** According to Table 7, when the theses were analyzed with respect to their themes, the most frequent theme in the educational administration master was found to the theme of school administration 62.4% measuring the degree to which principals practicing leadership whereas 22.9% related to educational planning by a descriptive manner without applying any kind of planning paradigm. Meanwhile, the most frequent theme in the Psychological Guidance and Counseling Master was found to the theme of mental health (63%) whereas under the theme of counseling, the most recurrent themes were (vocational counseling 16%, group counseling 11%, family counseling 7% and special need counseling 4%).

**What was the distribution in terms of type of references?** Table 8 presents the percentages of type of references. Accordingly, 33% of the references in the educational administration were on paper whereas 67% were electronic references. In the Psychological Guidance and Counseling Master, 52% were paper references and 48% were electronic references.
What was the distribution in terms of regions?:
Analysis of Table 9 indicates that among the leading regions where theses conducted was Alkakyeh (28.4% in the Educational Administration Master, followed by Muscat 9.2% where as 23.6% and 27.3 in the Psychological Guidance and Counseling Master). Within the scope of the results, there were 5 theses in the Psychological Guidance and Counseling Master which conducted in United Arab Emirates.

Which data collection tools were used?: Analysis of Table 10 shows that the Educational Administration Master employed “questionnaire” as the absolute data collection tool (100%), comparing with 70% of the theses in the Psychological Guidance and Counseling Master. Moreover, there was a variety in the used tools in the Psychological Guidance and Counseling Master as programs, tests and interviews.

CONCLUSION
The current study employed the “content analysis” as the method for interrupting the raw data in more significant meanings. The results indicated some main points: before 2014, some of the theses in the educational department were supervised by non-specialized faculty, this could be an indicator of the hiring system at the university which didn’t take the importance of specialty in real consideration that time and also didn’t look up to the importance of hiring faculty with ranks, even within the reform that happened after year 2014 issue related with faculty ranks still a potential. Moreover, result of the current study shows that there is an equal gender representation in the graduate student’s body which indicates that Omani female graduate student has the same opportunity and right to continue higher education.

In terms of advisor position, the results show that most of the theses in the educational department are assistant Professors which might not be with the line of research improvement. Moreover, the results show that there is a variety of the themes in both Masters and a domination of the descriptive method which uses questionnaire as the main and only tool of collecting data with the focus on K-12 school body which mostly conducted in Muscat and Alkakyeh. Moreover and according to the results, it could be said that, graduate students might not acquiring enough knowledge of process of sampling and how to choose the suitable type of sample approaches.

SUGGESTIONS
In the light of the current study findings, the following suggestions could be put forward:

- The administration at the University of Nizwa may benefit from the current study results concerning issues related to the policy of hiring faculty with ranks and the instructions of thesis supervision.
- Researchers could use the table of this study for future research.
- Comparisons could be conducted with other studies using content analysis approach.
- The current study may attract the attention of faculty and graduate students to the importance of using the mixed method in their theses.

REFERENCES

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Ala'wad, D., 2013. The educational role of faculty members in promoting scientific integrity among graduate students, from their point of view field study. Master Thesis, Imam Muhammad ibn Saud Islamic University, Riyadh, Saudi Arabia.


Anand, M., 2006. [Qualitative research: Of the dynamics of its evolution undeniable achievements and to the present questions (In French)]. Recherches Qual., 26: 5-31.

Anonymous, 2008. [Guiding principles for coaching graduate students]. Association Canadienne pour les Etudes Superieures (ACES), Ottawa, Canada. (In French)

Anonymous, 2009. [Study on the Canada Graduate Scholarships (CGS) and related programs]. Institut de Recherche en Santé du Canada (IRSC), Ottawa, Canada. (In French)


Yusof, D., 2009. A different perspective on plagiarism. Internet TESL J., Vol. 15,