



UNIVERSIDAD DE QUINTANA ROO

DIVISIÓN DE CIENCIAS POLÍTICAS Y HUMANIDADES

**The development of research self-efficacy in
students from the Master in Education**

TESIS

Para obtener el Grado de
LICENCIADO EN LENGUA INGLESA

PRESENTA

José Manuel Gutiérrez Arceo

DIRECTOR DE TESIS

Dra. María del Rosario Reyes



Chetumal, Quintana Roo, 2014.



UNIVERSIDAD DE QUINTANA ROO

División de Ciencias Políticas y Humanidades

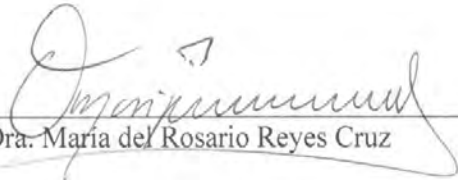


Tesis elaborada bajo la supervisión del comité de asesoría y aprobada como requisito para obtener el grado de:


LICENCIADO EN LENGUA INGLESA

COMITÉ DE TESIS

Directora:



Dra. María del Rosario Reyes Cruz

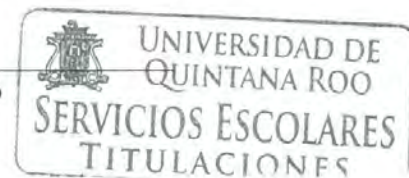
Asesor:


Dr. Moisés Damián Perales Escudero



Asesora:


Mtra. Griselda Murrieta Loyo



ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my thesis supervisor Dr. Maria Del Rosario Reyes Cruz whose time, experience and remarkable knowledge made possible to carry out this project and give the best of myself to conclude it. I appreciate her encouragement and the opportunity she gave me to be involved in this project from which I have learned to believe in myself and to be more ambitious. Also, I would like to thank, Dr. Edith Hernández, who recommended that I work on this project and who, I must admit, was one of the first role models I met along this five years of study. Finally, I would like to thank my thesis committee members Dr. Moisés Damián Perales Escudero and MSc. Griselda Murrieta Loyo for their helpful comments and advice in revising my thesis.

I would like to sincerely give thanks to my father for all the afternoons he spent with me and my siblings in spite of his tiredness. Also, I would like to thank my mother for all her love and support. Therefore, I dedicate this thesis and five school years to them which are part of the fruits of their work and love.

Last but not least, I would like to express my gratitude to my classmates and especially to my friends from college whose names I used to protect the participants' anonymity. This would have been a longer and less cheerful path without their company.

TABLE OF CONTENTS

Acknowledgements	III
Table of contents	IV
List of charts	VII
Abstract	VIII
CHAPTER 1: INTRODUCTION	1
1.1. Background.....	1
1.2. Rationale.....	2
1.3. Objective.....	3
1.4. Research questions.....	3
1.5. Significance of the study.....	4
CHAPTER 2: CONTEXTUAL FRAMEWORK	5
CHAPTER 3: THEORETICAL FRAMEWORK	10
3.1. Conceptual framework.....	10
3.2. Review of the relevant literature.....	19
CHAPTER 4: METHOD	27
4.1. Characteristics of qualitative research.....	27
4.2. Qualitative research strategy.....	28
4.3. Participants.....	29
4.4. Instrument.....	29

4.5. Procedure.....	30
4.6. Data analysis.....	30
CHAPTER 5: ANALYSIS OF RESULTS.....	32
5.1. Results of Minerva.....	32
5.2. Results of Ana.....	41
5.3. Results of Sergio.....	52
5.4. Results of Mariela.....	58
5.5. Results of Andrea.....	65
5.6. Results of Russell.....	73
5.7. Results of Mary.....	81
5.8. Overall results.....	89
CHAPTER 6: DISCUSSION.....	94
6.1. RQ1: How did self-efficacy sources influence the students’ perception of research self-efficacy?	94
6.2. RQ2: What are some particular features that influence the perception of their research self-efficacy?	100
6.3. RQ3: What are the turning points in the process of their research self-efficacy development? ...	103
6.4. RQ4: How have the perceptions of their research self-efficacy changed?	103
CHAPTER 7: CONCLUSION.....	106
7.1. Summary.....	106
7.2. Limitations.....	108

REFERENCES 109

APPENDIX..... 114

LIST OF CHARTS

Table 1: Educational offering

Table 2: Option of qualification in college and reason why they did not choose a thesis

Table 3: Research experiences prior to the MA

Table 4: Consequences of stress and workload

Table 5: Participants' perception about their research skills

ABSTRACT

Self-efficacy is defined by Bandura (1997) as the beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments. Research-related self-efficacy has been included in recent studies, but the majority of them have approached this construct from a quantitative design by measuring it. Its development, then, has been overlooked. The aim of this study is to understand the development of the self-efficacy in research of the students from the Master in Education of the UQROO. A narrative design was chosen to recount the students' experiences in research during the completion of their bachelor's degree and their master's degree. Seven students from the fourth generation of the master's program were interviewed. The interviews were recorded to later be transcribed and facilitate the data analysis. Among the major findings, the students perceived themselves in the middle of a process; interpersonal factors played a key role in their academic performance, and previous experiences in research did not prepare them enough to face the master's program dissertations. These findings could help supervisors to improve the teaching of research skills and to help students to ease the path of becoming master's holders. Finally, limitations to this study and directions for future research are discussed.

CHAPTER I

INTRODUCTION

1.1 Background

It is commonly thought that the master and doctoral levels are the ones in charge of forming researches. As a matter of fact, in Mexico many master's degrees not only provide specialization but also include research in its programs. This is the case of The Master in Education of the University of Quintana Roo; it has two specializations: English teaching and educational technology, but among its objectives it also aims at teaching how to do research. Writing a thesis or dissertation is then the final product and requirement to obtain such degree; these papers should consequently demonstrate that the graduate knows how to carry out research. However, as mentioned by Moreno (2010), the Mexican educational system is catastrophic. Higher education and research do not receive as much support as they do in developed countries. In addition, not all the students who enter a master program might be willing to include research in their future careers. Some might stop there and start or continue working (Shawm, Holbrook, Scevak & Bourke, 2008); others could aspire to become researchers, for which they may have to pursue a doctoral degree. What is generally important is that research is included as part of the socialization of a master's degree holder. Considering this and taking into account that the undergraduate curriculum may not be meant to teach how to carry out research, the development of research self-efficacy in students at the master level seems to be an interesting object of investigation.

Self-efficacy is defined by Bandura (1997) as the beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments. After he first introduced his theory, it has been applied to different matters of life; self-efficacy in research has been no

exception. As an essential construct for this study, research self-efficacy is defined by Forester, Kahn and Hesson-McInnis (2004) as one's confidence in successfully performing tasks associated with conducting research (e.g., performing a literature review or analyzing data).

Many studies, especially in counselling psychology, are focused on measuring research self-efficacy. Most of them suggest that after administering some of the scales to measure research self-efficacy to the students, they can identify the ones who struggle and help them. For example, Unrau and Beck (2004) investigated how taking research courses enhances the self-efficacy in research of both graduate and undergraduate students of Social Work and Speech Language Pathology programs. Other authors like Lev, Kolassa, and Bakken (2009) compared the research self-efficacy perceptions of graduate and undergraduate students of nursing and their mentors. Overall, the conclusions draw attention on how to improve the research environment, increase research in the curriculum, and give advice to supervisors on how to help the doctor prospects.

Some qualitative studies have aimed to explore how researchers are socialized. They take into account several experiences like the role of social support (Jairam & Kahl, 2012), and the experiences that the doctoral candidates live before obtaining the degree. Examples of the latter are Grediaga (2012) and Moreno (2010), whose studies were carried out in Mexico. But these studies were focused on doctoral programs. One study that investigated the research experience in undergraduate students was conducted by Shawm, Holbrook, Scevak and Bourke (2008) but it was directed to the reaction of students to a mandatory research project.

1.2 Rationale

Most previous studies have focused on the doctoral level, and many were carried out in fields different from education such as nursing, sports and counselling psychology. The results most of

the times lead to discussions about how to improve the research environment. The study of the master level, where the first steps into research are taken, has been overlooked. In addition, there have been no previous studies in the University of Quintana Roo dealing with research self-efficacy. This study could make a relevant contribution to the studies of this subject in two areas: the ELT teaching and the educational technology instruction which are the two specializations of the master's program that will be researched. These are two areas that have not been widely studied, at least not in this region of the country.

Not only this study could contribute to the research done in the university because of its novelty, it is also concerned with a crucial aspect of the formation of the master student which is the conduction of research. If at the end of the program students obtain the degree, it should mean that they have learnt about research. Thus, this study could be very valuable at exploring the procedures and experiences under which research learning takes place. The results might raise questions as well as propose solutions towards the improvement of this phenomenon.

1.3 Objective

The objective of the present study is to understand the master students' experiences related to the development of research self-efficacy that they have experienced throughout the completion of their bachelor's degree and especially their master's degree.

1.4 Research questions

How did self-efficacy sources influence the students' perception of research self-efficacy?

What are some particular features that influence the perception of their research self-efficacy?

What are the turning points in the process of their research self-efficacy development?

How have the perceptions of their research self-efficacy changed?

1.5 Significance of the study.

Since there are no previous studies in the University of Quintana Roo dealing with the development of research self-efficacy, the results might shed light on the difficulties that students experience when being involved in a research process and the things that could be improved. This could be of great importance for the teachers from master's programs, especially, for the advisors because the evidence in this work could help them to take into account aspects that affect their mentees and that could have been unnoticed so far.

This study might also trigger and encourage further studies on the topic. As the nature of research is cyclic, after this qualitative work there could be others with a quantitative approach about the same issue. Research could lead to taking actions and finally improving and helping master-level candidates and even students from college in developing and enhancing their research self-efficacy. Moreover, students' experiences could be more valuable than informative sessions for the candidates to know exactly what kind of activities they will be demanded and the commitment they are expected to have. Consequently, candidates to the program may have the necessary basis to know whether this is the kind of formation they want or not.

CHAPTER II

CONTEXTUAL FRAMEWORK

The University of Quintana Roo

The University of Quintana Roo (UQROO) is the most important public university in the state of Quintana Roo. The first and main campus is located in Chetumal, capital city of the state of Quintana Roo, and was founded in May 1991 (Identidad Universitaria, 2014). Nowadays, there are campuses in Chetumal, Cozumel and Playa del Carmen. The Chetumal campus is divided in four academic divisions which offer the total of 16 bachelor's degrees, 8 master's degrees and 1 doctorate degree as can be seen in Table 1.

Table1: Educational offering at the UQROO

Bachelor's degrees	Master's degrees	Doctorate
<ul style="list-style-type: none"> -Government and Public Management -Social Anthropology -English Language -Foreign Affairs -Economics and Finance -Natural Resources -Commercial Systems -Humanities -Public Security -Energy Systems Engineering -Environmental Engineering -Network Engineering -Law -Surgery -Pharmacy -Nursery 	<ul style="list-style-type: none"> -Teaching of Mathematics -Economics of Public Sector -Public Economics and Management -Social Sciences Applied to Regional Studies -Planning -Applied Anthropology -Education: Specializations in: English teaching and educational technology -Applied Anthropology 	<ul style="list-style-type: none"> -Geography

The Maestría en Educación

The *Maestría en Educación con énfasis en Didáctica del Inglés o en Tecnología Educativa* [Master in Education with specialization in English teaching or educational technology] of the University of Quintana Roo began in 2006 (Reyes-Cruz, 2011, p. 181) and there have been four cohorts so far, one every two years. The participants for this study belong to the fourth generation. The program is competence-based and is designed for those professionals of the social sciences and humanities, especially for teachers or people with experience in the field who need to broaden their knowledge in any of the two specializations (Maestría en Educación, 2012).

The master's degree program lasts two years and is divided in four semesters. During the first year, students have a core curriculum in which there is a focus in education. In the second year, students are to choose between one of the two specializations. Moreover, there are optional courses in the summer periods.

Regarding research, its inclusion in the master's program can be seen in the objectives as well as in the curriculum. According to the chosen specialization, the objectives of the master's program are to form professionals in the fields of English language teaching and the teaching with emphasis in educational technology. It is important to remark that in both cases one of the objectives is that the master's holders acquire knowledge, attitudes, skills and values for teaching, innovation of educational processes and researching. Besides, as a requirement to obtain the degree, students must elaborate and defend a thesis or an educational innovation project.

Actually, candidates for the program must take a propaedeutics course in which they are taught basic elements of research (Maestría en Educacion, 2014); in this course they develop a research protocol which later becomes their final dissertation.

As seen in the curriculum, every semester includes one course dedicated to research. In the first semester there is a course called *Bases de la investigación educativa* [Bases of educational research] and in each of the other three semesters there is a research seminar. Since the first course, students analyze concepts, approaches and designs of educational research and through all of the research seminars they make use of this knowledge to elaborate and continue working on their thesis or educational project. The last course, research seminar III, is where precisely the students present the results of their works. Additionally, they have the opportunity to go on a research stay during the summer periods.

English language bachelor's degree

The following description of the bachelor's program is included because the majority of the participants studied it. In addition, an event, named the FEL, will be described because it can be regarded as a good research experience which some of them had. Within the context of the Master in Education there is one more event described as well: the Educational Research Colloquium, in which students also participated.

To begin with the BA in English language that is offered at the UQROO, the program is designed to be completed in 10 semesters and is focused on forming professionals capable of planning and giving classes of this language. Among its objectives, bachelors have to apply effectively the teaching methods and techniques necessary for every lesson; design and apply materials that suit the objectives of every course; and design and/or adapt the appropriate instruments of evaluation (Licenciatura en Lengua Inglesa, 1995). Research is also included in the objectives; one of them is that bachelors acquire knowledge about educational research,

methodological research and linguistic research and that they will be able to carry out these kinds of research in order to improve their teaching experience.

Courses concerning teaching training then are an important part of the program but as part of the undergraduate curriculum, students can also enroll in courses such as linguistics, psycholinguistics and sociolinguistics which are specialized in the language and that contribute to the inclusion of research as an objective of the program. Depending on the teacher, students can be asked to elaborate a research project as a final work in the previous courses. In addition, students are to take a research methodology course in the first semesters of the program and a research seminar course in the last ones. The objective of the first course is to teach students to use the scientific method to analyze social issues; they are taught the theoretical and practical instruments to apply research on the social sciences. Finally, the research seminar course provides students with the guidelines of quantitative and qualitative research and helps them to develop their protocols for the theses or various projects chosen as option of qualification.

FEL

The *Foro de Estudios en Lenguas Internacional*(FEL) [International Forum for the Study of Languages] is an annual forum held by the Language and Education Department of the UQROO (Foro de Estudios en Lenguas Internacional, 2013). This is a good opportunity for students and professors to present research papers and to give talks and workshops; students who sign up, for example, can present their projects developed in the courses of the BA and their proceedings are later published in the web page of the UQROO. Known as the FONAEI from the 2005 to 2008 edition, the FEL's tenth edition will be held in October 2014.

Educational Research Colloquium

The *Coloquio de Investigación Educativa* [Educational Research Colloquium] is a one-day event organized by the Master in Education which aims at socializing students in the presentation of research projects by precisely presenting the results from their theses. Two keynote speakers are invited, one per each specialization, and it is also open to any other teachers willing to present their projects. The masters' students from this cohort participated in the last edition when they were in the third semester of the program. They presented the preliminary results of their theses or educational innovation projects and in concordance with the objectives of the colloquium they received feedback so as to improve their projects and socialized in the field of research.

CHAPTER III

THEORETICAL FRAMEWORK

In this section, the theory that supports the study will be presented. After the introduction of the self-efficacy, it will be reviewed the literature found concerning it. The studies with a quantitative and mixed approach will be described to then go and present the ones with a qualitative design.

3.1 Conceptual Framework

In order to explore research self-efficacy it is necessary to first understand what self-efficacy is and how it works. Perceived self-efficacy is an essential component of Bandura's social cognitive theory. The most important principles of the social cognitive theory will be explained below.

Bandura (1997) defines perceived self-efficacy as the beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments. In other words, it is not concerned with the actual ability that one has to achieve a goal but with one's beliefs of how well one can perform a task. It is about the belief of what one can do under different circumstances with whatever skills one possesses. Self-efficacy as applied to this study would then be linked to the beliefs of how capable students from the Master in Education are to carry out research-related tasks and how they have developed this self-efficacy in research through their bachelor's and master's degree.

According to Bandura, people's beliefs in their efficacy affect almost everything they do: their thoughts, motivation, feelings and behaviours. Motivation, for example, is regulated by shaping aspirations and the outcomes expected for one's effort. They also influence the choice of activities. Not having enough confidence makes people avoid tasks which they consider difficult

or even impossible. And when they undertake such activities, they tend to lose a lot of concentration by thinking of their weaknesses which makes it harder to overcome stress and depression. Bandura states that when these low self-efficacious people think of their deficiencies they do not focus on how well to perform the actions they are undertaking. In addition, they recover slowly from failure and it is not necessary a major misstep to make them lose confidence.

On the other hand, the most self-efficacious people will take greater risks and better opportunities, which in the long run lead to success. They also view themselves as partial architects of their own destiny. They tend to put more effort and concentration when things get difficult and also recover faster and easily from failure. Their optimistic sense of self-efficacy fosters psychosocial well-being and personal accomplishments through self-challenge, commitment, motivation and nonintrusive task orientation.

Beliefs of personal efficacy seem to be good predictors of human attainments. However, this is not always true. Actual performance and beliefs of self-efficacy cannot be related if the capabilities being measured are not similar. This can occur when the individuals have no adequate knowledge of the tasks being undertaken or the way in which a social system works.

Faulty self-knowledge can arise from other sources; for instance, in new and unfamiliar situations, people rely on beliefs of similar situations which can be sometimes misleading. Self-efficacy can also be misjudged when personal factors distort self-appraisal processes. The distortions may occur during the cognitive processing of them or during the recall of relevant efficacy experiences (Bandura, 1997, p. 70).

Deficiencies of assessment include overconfidence of self-efficacy beliefs and underestimation of the task. People could have an accurate judgment of their skills but as mentioned before, the task demands might be unknown or even underestimated. On the contrary,

tasks might be well known but the capabilities that one possesses might be overestimated.

Misjudgements then create disparity between efficacy belief and action.

These misjudgements may carry consequences for the person who makes them. Depending on the activity, the costs of trying to exert control over them unsuccessfully will vary. Under-confidence carries consequences as well as overconfidence; especially because by avoiding tasks people pass opportunities. People mostly regret educational opportunities forsaken, careers not pursued and risks not taken rather than the consequences of the actions that were actually done. This demonstrates that as long as the consequences are not dangerous, taking risks more probably will lead to benefits rather than not taking them. In addition, even the most talented people face doubts from time to time, so being optimistic is important at the moment of judging the tasks and one's self-efficacy.

Realists may adapt to the reality of the situations but optimistic people are likely to change those situations. In fact, even though they were rejected at the beginning, most innovators and greater achievers struggled to succeed over adversity. The most resilient people then will stand against anything. The beliefs in themselves motivate them to continue even in the face of obstacles. They will invest the necessary effort to accomplish their objectives. It does not mean that they are not aware of the difficulty; they are, but they do not see goals as unachievable in spite of the negative instances.

Sometimes, optimistic people may face a dilemma when their self-efficacy generates non-productive effort. Then, when they consider they are facing way more superior accomplishments they are likely to focus their effort in other activities. However, some might decide to continue despite the evidence that the task is unattainable or that they do not have the necessary capabilities. Self-deception then would occur when someone insists on ignoring them. They will even question and reject the evidence they are presented.

Sources of self-efficacy

Bandura hypothesized that self-efficacy beliefs are constructed from four sources of information: a) enactive mastery experiences, b) vicarious experience, c) verbal persuasion and d) physiological and affective states. These sources of self-efficacy are not independent; they operate together. Moreover, these four sources of self-efficacy along with time can increase or diminish self-efficacy and their impact depends on how that information is cognitively processed.

A) Enactive mastery experiences: These are the most influential source to develop self-efficacy because they are about the successes and failures that individuals go through. The students' experiences that will be analyzed in this work are the ones related to research such as their final projects from their research courses, their theses done in the BA and the theses they develop for their master's degree. Generally, according to the results of a certain task, the individual could feel motivated to continue or to quit and self-efficacy is either raised or lowered. Nonetheless, failure does not always mean lowering the beliefs of self-efficacy as well as succeeding does not always mean the increment of such beliefs. Especially when setbacks give people experience in overcoming obstacles and when failures teach people that they need more effort. Master's students might have faced a lot of difficulties during their theses in the BA which then served as valuable experience to overcome their master's dissertation. Another possibility is that after completing a difficult task, people discover that they have low capabilities which in turn would not alter their self-efficacy and could make them avoid similar tasks in the future.

When undertaking new activities, people rely on pre-existing self-knowledge structures. How to judge and reconstruct new experiences in memory partly depends on the previous experiences. Efficacy beliefs then function as constructors of experiences. Similar experiences will be given more importance, strengthened and remembered; they will be stored in memory and

become part of the beliefs of self-efficacy. Experiences that are inconsistent with previous ones will be diminished or forgotten. Continuously choosing similar activities that will reinforce the beliefs of self-efficacy and having repeated success is helpful to develop a strong sense of self-efficacy. Once this occurs, occasional failures will be unlikely to lower the beliefs in one's capabilities. Self-efficacious people will instead relate poor performance to faulty strategies, situational factors and insufficient effort. This last one is an important factor related to mastery experiences.

Ability and effort are seen as interdependent determinants of performance. Some people view effort as a compensation for low capabilities whereas others think that effort enhances ability. This means that the amount of effort expended affects the perceived efficacy that results from performance accomplishments. Effort is also an important factor in self-appraisal of efficacy from failures. To perform well without much effort does not raise self-efficacy whereas failing in spite of making a great effort will surely lower it. High efficacious people then view failure as a lack of effort while low efficacious people consider it happens due to a lack of ability.

B) Vicarious experience: There are some activities, however, in which it is difficult to measure one's performance; in addition, people sometimes lack knowledge of their own capabilities. Then, by social comparison people judge their capabilities in relation to the performances of others. This source of information is known as vicarious experience.

There are several ways in which the judgment of our self-efficacy is affected by other's performance. Our self-efficacy increases when we have better results than our partners or competitors and it could also decrease when we experience poorer results than theirs. Nevertheless, we do not always see others as competitors but as models. We think that if they have certain results, then we could also have them. When we see models fail, we can also be discouraged from even trying. Nonetheless, this might not happen if we believe that our strategies

to face a problem would give us better results. Master's students might have felt encouraged to enter the program or to continue it in spite of difficulty after seeing their models overcome adversity and succeed; their models might be students from previous cohorts, their own peers or even their teachers. What is more important is how similar they are to those models.

Similarity plays an important role in vicarious experience. The model should have the same or a slightly similar level of capabilities; otherwise, there will not be a great effect. In that case, master's students' beliefs of self-efficacy should not be raised when a model that is way more skilled than them is successful or lowered when the less skilled fail.

C) Verbal persuasion: Its importance relies on the motivation that people receive from other's points of views, positive critics and encouragement. One could be good at a certain field but not be confident enough to try it. Sometimes people do have the necessary capabilities and this encouragement consequently helps them not to pass good opportunities. Of course, the positive persuasion should not be far from people's reality. When someone is given false hopes and that leads to failure, not only efficacy beliefs are lowered but also the persuader loses credibility.

Self-efficacy will increase based on the persuader's credibility and knowledge of the capabilities being judged. It is better if the persuader already masters the skills he or she is judging. However, some people might rely more in their own knowledge of their skills than in what other people tell them. Teachers of the master program may not only be models but also reliable persuaders for the master's students. Due to the knowledgeableness and experience of professors, their comments and feedback could have a great influence in students' self-efficacy.

D) Physiological and affective states: This source involves the body states and reactions that people experience when doing certain tasks and the interpretations that they give them. Emotions have different physiological reactions and they also change from individual to

individual. For example, the heart races alike in fear, euphoria and vigorous physical exertion (Bandura, 1997, p. 109). Then, how these reactions are read is very important. People with high self-efficacy might regard nervousness as a typical reaction to activities such as giving a speech while people with low self-efficacy might think it is a consequence of their unpreparedness and weaknesses.

One way in which this functions is by the level of attention: people who start paying attention to their body reactions will lose focus on how well performing the activity in which they are involved. In addition, the level of activation also plays an important role. Moderate reactions are helpful by heightening the attention necessary for the task but intense reactions will be disruptive instead. The level of activation will depend on the complexity of the task. Therefore, activities which are complex could lead people to get distracted more easily than those that are simpler. For example, the degree of complexity from the MA and the tasks carried out there will increase and consequently will require more attention in comparison to those in college.

In the case of the master's students, when carrying out research tasks for their theses, the ones with low self-efficacy might feel stressed or worried because of the importance of the thesis, the deadlines and the workload and could attribute those feelings to their incompetence which most of the times predicts poorer results. The most self-efficacious, on the other hand, might approach the workload with more motivation and confidence and may cope better with stress and other reactions.

Students' cognitive self-efficacy

Within the social cognitive theory, Bandura describes how self-efficacy is modified through the different stages of life. Due to the nature of the participants as master's students, the following

description is important because of its analysis of how self-efficacy influences on students' academic achievement.

According to Bandura, when we are younger, school is seen as the place for cultivating and validating cognitive capabilities. One of the goals of education is to give students the self-regulatory capabilities that enable them to educate themselves and to continue like this throughout their lifetime. As a matter of fact, advanced academic preparation requires students to be more self-directing in their learning. This kind of learning, in turn, requires motivation as well as metacognitive strategies.

Bandura states that students' beliefs in their efficacy to master different academic subjects operate as important contributors to the development of cognitive competences that govern academic achievement. This occurs directly by affecting the quality of thinking and good use of acquired cognitive skills and indirectly by heightening persistence in the search for solutions. Some factors that take part in this process are the level of cognitive ability, prior educational preparation and attainment, gender and attitudes toward academic activities; the more they alter self-efficacy beliefs, the greater the impact they have on academic achievement.

Effective intellectual functioning requires metacognitive skills for organizing, evaluating, and regulating one's thinking processes. In fact, failures in intellectual performance are often caused by deficient use of these skills rather than by lack of knowledge. The most self-efficacious students are the ones who make use of cognitive strategies, manage their time and learning environments better, and monitor and regulate their learning closer. Then, by managing their learning, these students have better academic performance.

Motivation, as stated before, is also important at this academic level. Self-motivation can be best sustained when a goal is divided into sub-goals. Self-efficacious people may divide the amount of effort and consequently ease a certain task. Sub-goals will also function as rewards

and let people see the results of their work. When people develop a strong sense of self-efficacy, they also develop an attraction to academic achievement and a rewarding sense of fulfilment through personal accomplishments.

Three more factors that are related to students' intellectual self-efficacy are teachers' feedback, peers' influence and the academic anxiety. Teachers' feedback can influence students' judgements of their capabilities and their performance at school. As seen before, some people might raise or lower their self-efficacy depending on what are the reasons they are told they succeeded; it could be whether ability or high effort. Moreover, the quality of the work is important when giving feedback. Telling someone that their work is of good quality will raise self-efficacy whereas giving feedback without making reference to its quality will not alter it.

In the absence of teacher's feedback and appraisals, students can judge their performance by comparing themselves to others. Thus, peers have certain influence in the development and validation of intellectual efficacy. Apart from comparison, modelling and interpersonal affiliation contributes to social construction of intellectual efficacy. By interpersonal affiliation the peers with whom one associates partly determine which potentialities will be cultivated. If students are taught to value education since children, they will likely associate with peers at the college level who promote attitudes, achievement standards, and socio cognitive skills that lead to intellectual pursuits.

Anxiety will increase with the academic level. It is normal that college students be more apprehensive because at that stage their performance determines their future careers. A low sense of efficacy to manage the academic demands and interpersonal aspects of college life is accompanied by high levels of anxiety and symptoms related to stress. However, parental and peer support can help students to cope with these stressors.

As part of a well based and accepted theory, the research self-efficacy construct has been applied to several studies from different fields. Its principles as well as its four sources and its influence on students' performance were covered here because those are the aspects that were applied for this study and the answering of the research questions.

3.2 Review of the relevant literature

Now that the theory has been explained, the literature concerning research self-efficacy will be reviewed. Firstly, literature about measuring research self-efficacy throughout different scales like the Research Self-efficacy Scale (RSES) will be identified as well as some studies regarding the reliability of such scales and other quantitative and mixed studies. Then, qualitative studies focused on the socialization of researchers will be presented.

Even though the present study is qualitative, the review of quantitative ones offers results which are related to the theoretical framework and could be useful for the analysis of this study. This also shows the relevance of this study since it approaches self-efficacy from a different perspective. With reference to the studies about socialization, they are included because that construct is closely related to that of self-efficacy even though they belong to different theories.

Studies that measure research self-efficacy

Unrau and Beck (2004) investigated how practice and research courses within professional academic programs contribute to students' self-efficacy in research. The Research Self-Efficacy Scale and a pre-test post-test comparison group design were used in 60 Social Work and 75 Speech Pathology Language undergraduate and graduate students. They found out that educational programs can expect an improvement in the confidence to do research over the

semester when students take research courses and that using the RSES can help to detect students who struggle with research. Unexpectedly, students from both programs did not seem to have problem with performing electronic literature searches, using technology for research and writing literature reviews. In addition, responses from an open-ended question added at a second administration of the RSES showed that the experience from which SPL students gained more confidence in research was completing an assignment of their research course in which they had to write a proposal, originate a research question, review the literature related, design the methodology for the assignment and include ethical considerations. This study proposes activities such as conducting reviews of literature, analyzing published research, and writing research papers, to enhance confidence early in an educational program.

Lane, Devonport, and Horrell (2004) conducted two studies. The aim of the first one, a quantitative study, was to investigate the influence of self-esteem on the processing of efficacy related information. The aim of the qualitative one was to explore student perceptions of research methods modules. A self-esteem scale, a self-efficacy scale and focus group interviews were administered to undergraduate and postgraduate sport students. Findings from the quantitative part support the notion that performance accomplishments influence self-efficacy and that low self-esteem students are seriously affected by poor performance. Collectively, both studies showed that developing confidence in the ability to perform key research skills is important for success. Besides, lecturers should be encouraged to design research methods modules which enable all students to master research skills. Students should be encouraged to apply research skills across modules, to reinforce and strengthen their knowledge, which should enhance self-efficacy. This study along with that of Unrau and Beck also explored the research in curriculum and what they regard as essential is that research should be fostered early in their academic programs.

Another study that measures self-efficacy was conducted by Shivy et al. (2003) who wanted to demonstrate how a comprehensive evaluation of a research training environment could be performed using a combination of existing and exploratory methods. They used the research training environment scale (RTES), the Self-Efficacy in Research Measure (SERM) and free-response data from 35 doctoral students in the Counseling Psychology PhD program at Virginia Commonwealth University. They found that the interpersonal aspects of the research-training environment were most important to those students. Their data also suggests that two personal qualities of faculty advisors promote student involvement in research. Firstly, faculty advisors who are helpful, caring and involved with students draw them into research. Secondly, faculty advisors who are passionate and positive about their research and convey that passion will likely motivate students.

Lambie, Hayes, Griffith, Limbert and Mullen (2013) conducted a study to investigate the relation among students' research self-efficacy, interest in research and research knowledge. In addition, they wanted to find out whether or not there was a relation among these three constructs and the students' year in the program and their demographic data. The authors administered a Research Self-Efficacy Scale, the Interest in Research Questionnaire, and the Research Knowledge Assessment to 67 students enrolled in a full-time doctoral program in education. The authors found out that students with more prior research experiences such as courses and publications obtained higher scores in the three instruments. Additionally, the higher results of the students in the third year suggest that they become more comfortable as they have spent more time in the program and perform more research-related tasks. However, interest in research was not related to the students' year in the program. The authors also suggested that since interest in research and research knowledge were predictors of research self-efficacy, doctoral programs may want to promote the first ones in order to enhance students' research self-efficacy. This

study differs from all the previous ones in that the participants belonged to an educational program which makes it relevant to the present paper.

Other studies that measured self-efficacy but included different variables and attempted to produce other results were conducted by Lev, Kolassa, and Bakken (2009) and Brown, Lent, and Ryan (1996). The purpose of the first authors was to compare the students' perceptions of confidence in their abilities to pursue research with their mentors' perceptions about their students. This study was conducted with undergraduate and graduate students of nursing. They collected the data through dyad, on-line surveys and the Clinical Research Appraisal Inventory (CRAI). Mentors in this study perceived their students to be much more self-confident in their ability to conduct research than the student's self-perceptions of their abilities. It was discussed that this could lead to less favorable mentoring experiences and incorrect feedback for the students which in turn might not let them make the necessary adjustments. The authors concluded that the relationship between mentee and mentor is vital and that it may encourage students to undertake research careers. Finally, Brown, Lent, and Ryan aimed to revisit the possibility that the relationships of the training environments and self-efficacy beliefs to productivity may be somewhat different for female and male graduate students. They administered the Research training environment scale (RTES) and Self-Efficacy in Research Measure. Among their discussion, it is suggested that the perceptions of the research training environment is more related to self-efficacy in women, but self-efficacy in men is more related to their research productivity than in women. Any of the other studies investigated whether or not there are differences in research self-efficacy regarding gender.

Büyüköztürk, Atalayb, Sozgunc and Kebapçı (2011) performed an exploratory factor analysis (EFA) for structural validity of the Research Self-Efficacy Scale. They concluded that the RSES for university students can be indicated psychometrically satisfactory. It is further

considered that the scale can contribute towards identifying self-efficacy beliefs of undergraduate and postgraduate students so as to allow for possible intervention-oriented studies aiming students with low levels of self-efficacy. However, other authors like Forester et al. (2004) studied this and other two existing inventories: the Self-Efficacy in Research Measure; and the Research Attitudes Measure. Although they proved that the global results of such scales are valid, they did not recommended using the subscales. This, in no way diminishes the results of the previous studies which used these three instruments.

One last study that included research self-efficacy as a variable was carried out by Shawm, Holbrook, Scevak, Bourke (2008). They investigated how pre-service teachers reacted to a mandatory research project, the impact of that experience on their perception on the usefulness of research, their engagement with professional academic communities, and their intention to continue with postgraduate studies. The authors administered a survey to 159 fourth year pre-service teachers. They found out that the students with higher self-efficacy and a closer relationship with their supervisors were the ones that might end undertaking postgraduate studies, and that their choice of topic was one of the most difficult parts of their projects. In addition, it was found that the intention to continue on to postgraduate studies was linked with confidence in carrying out research tasks. The authors concluded that more emphasis should be put in order to improve the mandatory research project. Overall, the effect of their research program causes a negative impact on the students. For most new teachers, there is no interest in doing research so there should be more attention on finding and supporting those undergraduate students who do want to do research. This study, along with that of Lambie et al (2013) was the only quantitative study that focused on an educational program.

Qualitative research about socialization of doctoral students

Jairam and Kahl (2012) examined the social support networks of doctoral students who had successfully completed a doctoral degree. The authors collected the data from 31 participants with completed doctoral degrees from multiple universities in the United States through an open-ended, online, qualitative survey. They identified three sources of support: academic friends, family, and faculty. In the three of them there were both positive and negative influences. The authors suggested to doctorate candidates that family members should be educated about the burdens of undertaking postgraduate studies; that classmates offer valuable coursework help but they also need to prepare for peer competition; and that it is important to choose supervisors with knowledge about the research topic. Results also suggested recommendations for doctoral advisers, including awareness of how negative communication among faculty impacts doctoral students. These findings corresponded with that of Shivy et al. (2003) in which it is proposed that the relationship with the advisor is vital to succeed in the doctoral level and also that the advisor is a role model that could attract students into doing research.

In Mexico, to the best of my knowledge there are two recent studies concerning the training of doctors. Grediaga (2012) carried out an exploratory study to narrate the procedures in which the new generations of researchers are formed. Ten doctoral programs were analyzed. The author dedicates part of the study to the socialization of the graduate students and how they become colleagues and later researchers. It was concluded that the students become researchers after dealing with several challenges that their programs demand. Some of the tactics to overcome this process are the presentation of their works in national and international forums and the adaptation to handle criticism. Furthermore, it was mentioned that the students become

independent and mature researchers at different paces. These doctoral programs, however, belonged in different disciplines; just one of them belonged to the field of education.

Another study, which was focused only on educational programs, was conducted by Moreno (2010) who identified the conditions in which the students from 11 doctoral programs are socialized. There was special attention to five aspects of the training process: personal, familiar, economical aspect, previous formation and the conditions of their doctoral programs. Among the conclusions, it is suggested that previous experiences such as the master's programs and early encounters with the field of research had a great influence in the completion of their doctoral degrees. Taking control of their own training process also determined their socialization and was a turning point that all candidates shared. Finally, it was also mentioned that the support of their families was decisive and that there is a link between the affective and the cognitive situations that was present throughout all their programs.

One qualitative study that did include self-efficacy and that directed attention to an educational program was conducted by Baltes, Hoffman-Kipp, Lynn, Weltzer-Ward (2010). However, this study was carried out in a doctoral program and took into account only the experiences from one course. It aimed to understand factors in doctoral students' first core research course experience that enhance students skill development and self-efficacy. Since this was a case study the only participant was a 55-year-old woman. Training on basic research design and information on qualitative research seemed to be good for the student's skill development while there was not found an aspect of the course that might have interfered with her development. It also appeared that the information in the course and text books for planning a qualitative research was useful since she reported confidence in planning such a study. Personal factors also played roles in her self-efficacy development, these were her own expectations for her learning and her stressors related to time limitation.

To sum up, most of the studies involving research self-efficacy are focused on measuring it by means of the different scales that have been developed like the RSES and the SERM. Authors such as Unrau and Beck (2004) and Lane, Devonport and Horrell (2004) concluded not only that research self-efficacy should be promoted in the curriculum but also that it can be enhanced through it. These studies, however, have a quantitative approach so they did not explore self-efficacy development.

Qualitative research, on the other hand, has been focused on exploring the socialization of doctors. Even though authors like Moreno (2010) and Shawm, Holbrook, Scevak and Bourke (2008) carried out studies within educational programs, they did not openly discuss research self-efficacy and its development in their work except from Baltes, Hoffman-Kipp, Lynn and Weltzer-Ward (2010). Besides, most of the studies analyzed doctoral programs so self-efficacy in research during master level appears to have been ignored and to be needed.

This study attempts to fill this gap by exploring the research self-efficacy development in students from the master educational program of the University of Quintana Roo. In order to do this, four research questions have been established as presented in 1.4:

RQ1. How did self-efficacy sources influence the students' perception of research self-efficacy?

RQ2. What are some particular features that influence the perception of their research self-efficacy?

RQ3. What are the turning points in these stories?

RQ4. How have the perceptions of their research self-efficacy changed?

CHAPTER IV

METHOD

Due to the objectives of the present study, the qualitative design was the necessary one to carry it out. In this chapter, a brief description of this research design will be given. After that, the precise methodology to make it possible will be explained including steps such as the description of the participants and the data analysis process.

4.1. Characteristics of qualitative research

Qualitative research is used when we want to explore a problem or issue with more detail. As exemplified by Maxwell (2005, p.23), the goal of qualitative researchers is to find out how x plays a role in causing y and what process connects them rather than finding out whether and to what extent variance in x causes variance in y , as quantitative researchers do. In order to do this, there are several characteristics typical of qualitative research used to study a certain problem.

Among some characteristics mentioned by Creswell (2007), qualitative researchers tend to collect the data within the context of the participants. There should be a closer interaction with the individuals which consequently turns the researcher into another instrument. Some of the most common instruments are the interviews, field observations and documents but being the researchers the ones who examine them, they are the ones who actually gather the information. In addition, closeness implies that the number of participants tend to be small in this kind of studies.

Other features of qualitative research are the holistic account and the use of a theoretical lens. The first one means that a more complex understanding of the problem is sought. As previously mentioned, we want to know the process, to get the general picture of the

phenomenon or issue. With regard to the theoretical lens, researchers often use a theory to support and guide their studies. Moreover, qualitative research has an emergent design. In other words, it has a flexibility that allows the researcher to modify some phases of the research process.

Contrary to the quantitative design, in a qualitative study there is low control of the variables, which explains why some phases such as the research questions or the instruments can be changed throughout the study. Furthermore, the instruments are easier to elaborate but the data collected has an increased difficulty to be analyzed as opposed to a questionnaire from a quantitative study. One more difference is the subjectivity to which qualitative research is more prone.

4.2. Qualitative research strategy

Qualitative research can be carried out using different approaches; among the most common, there are the phenomenology, the case study, the ethnography, the grounded theory, the narrative research and action research (Reyes-Cruz, Hernández & Yeladaqui, 2011, p.13). The approach chosen for this study is the narrative one. This approach is the ideal one to capture the experiences of a single life or the lives of a small number of individuals. However, it can also focus on certain aspects or events of their lives. The data is collected through interviews, journals, personal documents such as official correspondence about the individual, etc. (Creswell, 2007, p.54). It is also important to spend enough time with the participants in order to gather extensive information and to include a good description of their context.

4.3. Participants

The way in which participants were chosen was by a purposeful sampling (Creswell, 2007); they represented the total of students of the 2012-2014 generation of the Master in Education from the UQROO and they were in the fourth semester of the master's program. Participants were contacted via e-mail; there were supposed to be 8 students but one of them did not respond to my attempt to contact her. As a result, 7 students were interviewed, 2 men and 5 women who ranged in age from 23 to 30 years old. As mentioned before, the majority of them majored in English language, 5 being the number of English language bachelors; the other two majored in foreign affairs and commercial systems, both at UQROO. With regard to the specialization, 3 out of the 7 participants chose the English teaching specialization and the other 4 were in the educational technology one.

4.4. Instruments

Because the focus of this study was to recount the participants' experiences of research self-efficacy development during their bachelor's and master's program, the design that best could help answer the research questions was the narrative. Thus, unstructured, open-ended interviews to the participants seemed to be the most appropriate instrument to collect the data. The interviews lasted approximately one hour and were administered with the help of an interview guide. The interviews were recorded but the guide was of help to take some notes about the interviewees' responses and to stay to the questions. In the case of a second interview, follow-up questions were asked to clarify certain aspects as well as doubts that arose in the first one. As a way to elicit information, three participants were also shown video recordings and the other four photographs to recall the Educational Research Colloquium experience.

Apart from the interviews and the video recordings, one useful material was the curriculum. Its analysis along with the description and the objectives of the master's program gave a clear idea of the importance and integration of research in it.

4.5. Procedure

Participants were met in a quiet place within the university to facilitate their audio recording. Once there, they were given a consent form and reminded the importance of their participation and the protection of their names by replacing them with an alias as suggested by Creswell (2007). Reassuring them about their anonymity was important to make them feel more comfortable and consequently make them provide more information. In addition, the interviews were conducted in Spanish so the extracts used to present the results had to be translated into English. Out of the 7 participants in this study, 4 were met for a second interview to clarify some doubts that arose in the first interview and to ask things that were not considered before. With regard to the Educational Research Colloquium, they were shown a few minutes of the video or the photographs of their participation only.

4.6. Data analysis

After recording the interviews it was necessary to transcribe them, which facilitated the analysis of the data. For this analysis, I followed Madison's (2005) and Wolcott's (2001) data analysis strategies: sketching ideas, coding, reducing codes to themes or "families" and relating them to the theoretical framework. It was also important to apply a second cycle coding as suggested by Saldaña (2009). Some of these codes or themes were based and preconceived from Bandura's self-efficacy theory. However, there were different and new themes that emerged from the participants' stories.

As the qualitative research is thought prone to be subjective, some strategies to validate the analysis were important. The most feasible strategy was to have my supervisor checked the thesis, but I also had it revised by other professors external to the study. Another good form of validating the results was to ask the participants to check their transcriptions so as to confirm that what was written is what they meant at the interviews. They were sent their transcriptions via e-mail and asked to send a response confirming the veracity of the transcriptions and their use in this project.

CHAPTER V

ANALYSIS OF RESULTS

In this section, the four research questions will be answered firstly participant by participant. Verbatim quotes from the interviews will be included as a means of responding the questions and supporting the findings. As a way of protecting their confidentiality, their names have already been changed as well as those of their teachers. Finally, a comparison among the 7 participants will be presented both in tables and in textual report.

5.1. Results of Minerva

How did self-efficacy sources influence the students' perception of research self-efficacy?

Enactive mastery experiences

In relation to the enactive mastery experiences, Minerva participated in the FEL forums since she was in the BA. However, the projects for her courses and giving talks in such forums did not demand much research; what she presented in the forums was workshops. Besides, she did her research protocol for the research seminar course but none of this seemed to have helped her to face the master's degree experience. She admitted that she did not have research skills and the master's degree was really difficult for her.

In college, she also had the opportunity to transcribe some projects for some teachers. By doing this, she learned how difficult and time-consuming this part of qualitative research was and opted for a quantitative approach instead when she entered the master's degree. She tried to avoid all the hard work she knew qualitative research involved:

Sí, claro ya sabía lo que llevaba el tiempo, transcribir, sentarse, ordenar, bueno un par de cosas y dije no, quiero cuanti... La verdad sí pues sí me ahorraría muchísimo tiempo. Sólo era vaciar la base de datos al SPSS y listo se acabó [Of course, I knew how much time it took transcribing, organizing and doing a couple of things and I said no, I wanted a quantitative approach...it would really help me save a lot of time. It was just entering the data into SSPS and it was over].

Vicarious experience

Regarding the vicarious experience, she predominantly relied on experts' guidance and collaborative work with her peers. In first place, she felt motivated to participate in the forums after seeing others presenting and participating in those forums. She thought it would be pleasant to be heard and to experience what they did:

Creo que estaba en quinto semestre cuando llevé Tecnología Educativa y pues yo veía que muchos, los maestros eran parte pues de los foros y que tenían ponencias, tenían esto, tenían lo otro y yo decía yo quisiera hacer eso. Entonces ésa fue mi motivación: ver a otros y esa experiencia que tenían los demás yo la quería tener [I think I was in the fifth semester when I took educational technology and I saw that many people, the teachers participated in the forums and they gave talks, they had this and that and I wanted to do so. That was my motivation: to see other people and I wanted to have the experiences they had].

The collaborative work with her thesis supervisor was also important during the master's degree. She described this process as a little difficult because her thesis supervisor was strict and demanding but she has learned a lot from her:

Sí, a la doctora Adriana (de ella he aprendido a investigar y sigo sus patrones). Bueno tengo ese patrón porque, pues, yo ayudé en una investigación con ella y... bueno en la que estoy haciendo ahora y en la que te comenté cuando no pude irme de viaje y esto me ha ayudado a... pues su formación, cómo es... no digo que voy a ser igual porque sería imposible aunque uno quisiera pero pues sí he aprendido algunas cosas muy positivas de ella que sí, eso: quisiera ser como ella [I have learned to do research from Doctor Adriana. I have this role model because I participated in one research project with her and also in the one I am working now; the one I talked to you about in which I could not travel. Well, her training, the way she is... I am not saying that I am going to be like her because that

would be impossible but I have learned so many things from her that, indeed, I would like to be like her].

On the whole, she liked to work collaboratively with her classmates because she could have their opinion about what and how she was doing. She could compare her progress in relation to them and this helped her not to feel lost. She even expressed that for future work she will still need that kind of work:

Ya tendría pues las bases suficientes para hacerlo (un proyecto de investigación). Considero que, pues, ya tengo una tesis muy avanzada y, pues, con eso y con otros ejemplos de otros compañeros pues supongo que no se me haría difícil. Sí tengo algunos problemas, tendría que preguntar a alguien si estoy haciendo lo correcto, que me digan una opinión [I would have enough basis to carry out a research project. I think that my thesis is in the final stages and considering this, along with the examples of other classmates, I guess it will not be difficult. If I have problems, I will have to ask somebody else if I am doing things right; I will ask for their opinion].

One more aspect that could be taken as vicarious experience is the influence her significant others had on her. Two of her partners during the BA and the MA undertook graduate studies. One of these men consistently encouraged her to follow suit and talked to her about the benefits of doing a master's degree. The other one served as an example that has been making her consider whether to continue studying or to focus on her personal life; two incompatible aspects of life for her.

Verbal persuasion

In regard to this source of efficacy, she mentioned that when she received feedback the teachers from the MA both scolded and flattered her. Even though she, as a sensitive person, might have had a more difficult time being scolded, she thought it was more valuable and admitted that the teachers took their time to check their work:

(Los profesores de la maestría) no te lo dan todo fácil así de que te dicen ah sí muy bien, a veces (otros profesores) así como que ni lo leen y dicen -ah sí, sí, perfecto- Entonces, (estos) se toman el tiempo para decirte –no, mira aquí estás bien, aquí estás mal, mejora esto [Teachers from the MA do not hand you everything on a silver platter; they do not tell you well done. Sometimes, other teachers do not even read your work and tell you that it is perfect. So, these teachers take their time to let you know when you are right, when you are wrong, and what things can be improved]...

There were some moments in which she cried, but after all, she thinks she has learned a lot from this scolding:

Era así como un sin mar (sic) [quiere decir un sin fin] de cosas que se me venían a la mente y obviamente me venía el sentimiento pero en ese momento no lo veía así como que –ay- me ponía mal pero ahora lo veo y digo si yo no hubiera tenido todo eso pues no sería la persona que soy [A lot of things came to my mind and it affected me emotionally. I felt bad but now that I look back I know that if I had not experienced all that, I would not be the person I am now].

Physiological and affective states

As part of the difficulty of undertaking graduate studies, Minerva suffered stress from her thesis. She regarded sadness and bad mood as part of this process as well as having ups and downs. She even had to see a therapist who gave her some treatment and went through a difficult time at home because she felt her family did not help her to overcome her stress; on the contrary, they worsened her situation. She had to move out of home to avoid the stress her parents and the workload of household chores caused her:

Yo no podía, no tenía tiempo para hacer eso (el trabajo doméstico), de verdad no tenía tiempo. Entonces, a raíz de eso mi estrés generaba... o sea la tesis, tarea y aparte mi casa, imagínate, y siento que eso igual reventó. Entonces lo que hice fue irme a vivir, rentar en otro lugar sola. Decidí, lo hice por ocho meses [I did not have enough time to do all the household chores, really, I did not have time. That caused me stress... I mean, the thesis,

the homework and the chores and I feel I exploded. So what I did was to leave home, to rent in another place alone. I lived like this for eight months]...

Even though she later came back, this decision was really helpful:

Cuando me fui me sentí tan feliz, tan feliz que no te puedes imaginar el peso de encima que me quite, de verdad, te lo juro. Fue así de que como que ya me sentía más feliz, como que ya sonreía, ya veía las cosas más claras [When I left home I felt so happy. You cannot imagine the burden I lifted from my shoulders, I swear. I felt happier, I could smile again and everything was clearer].

It seems that by the time she presented her advances in the Colloquium she was a more mature student and identifying her physiological reactions helped her not to feel discouraged by criticism:

Estaba muy nerviosa (durante el coloquio), muchísimo. Normalmente cuando estoy nerviosa hablo muy rápido... fue como que un comentario negativo, que hablaba muy rápido, que no se entendió nada y yo dije, ah, bueno es porque estoy nerviosa y todo eso [I was really nervous during the Colloquium. Usually, when I am nervous I speak very fast...there was a negative comment, that I spoke fast so they could not understand me, and I said well, it is because I am nervous].

What are some particular features that influence the perception of their research self-efficacy?

Her **parents** and her **personality** could be seen as major influences. Both influences are contrasting because even though her parents served in the military she described herself as a sensitive person. Most of the times, she talked about her mother as the one pushing her; she was strict, tough and did not expect her to cry. Her father, on the other hand, was described as the one that understood and helped her when she left home. Minerva was affected especially in the emotional aspect; she was not supported at the beginning, instead, they added more workload to her until she exploded. Once that they understood her situation they became more supportive.

Her childhood was described as a little traumatic because of the pressure to study hard. She reported her basic education as related to behaviourism and even in her English courses the grammar translation approach was used. This was quite different to higher education like her BA and MA in which she had to think critically. Moreover, obtaining good grades was an obligation rather than a simple merit:

Pues mi mamá o sea lo veía normal porque era parte de, o sea no era así de que -ay si hijo, yo nunca recibí eso de que el -ay bravo- siempre estuvo muy marcado de que yo tenía que serlo porque así era, no era porque era un premio o porque yo había logrado, no. Era una obligación en mi casa [To my mom, it was normal, it was not like –well done daughter- I was never told that. I had to do it because it was the only way. In my house, it was an obligation].

Another aspect of her personality that appeared to be influential is her preference for **collaborative work**. She has always liked to do her homework with someone else and when she made references to future work, she said she would undertake research projects as long as she can work with other people. She even admitted she did not like to work on her own:

Yo soy un tipo de estudiante que se mueve al ritmo de los demás. Es decir, si el grupito de aquí va hacia una tendencia pues yo igual, o sea nunca hago las cosas sola, no me gusta, siento que no rindo. Tengo que tener el contexto de los demás, sus opiniones para poder aprender. Bueno, como soy un tipo de persona de aprendizaje que tiene que ser colaborativo de alguna manera [I am a kind of student that works at others' pace. I mean, if this group follows a certain trend, I do so. I mean, I never work alone, I don't like it, I don't work the same. In order to learn, I need to have others' opinions. In some way, my learning has to be collaborative]...

Something related to collaborative work is the **friendship** she developed during the MA. She identified with one classmate more than with any other. From this friendship, she not only obtained emotional support but also academic help. They used to get together to do homework and this person also gave her advice to overcome some deficiencies such as writing in Spanish:

Como en su carrera ella estudió algo diferente a lo que es el área de educación pues ella era más así chorera, era así de que escribía y así y escribía más y así de que cómo puedes hacer eso –ay Minerva es fácil nada más tú échale choro, échale aquí-es que yo no sé. Ya ves que aquí es más de que pon la idea, en inglés es más pon la idea tal cual y punto, no le rodees ni le busques ni nada, lo que es. Y bueno ese tipo de formación pues te va ayudando y con las experiencias de otros agarras un poquito de lo que puedes para ti [Since she studied something different from education, she was more chatty; she used to write and write and I wondered how could she do it –Minerva, it is easy, just write this and add that- I don't know. When writing in English, you go straight to the point instead. And well, this kind of training helps you and with others' experiences you grasp some things].

Her **thesis supervisor** also played an important role because she not only was seen as a model but also was supportive when Minerva dealt with stress. She taught her a lot and was a good guide and also listened to her when she was overwhelmed by the master's degree workload:

La doctora Adriana ha sido muy puntual conmigo y he aprendido mucho de ella, ha sido muy estricta pero sin embargo (sic) me ha ayudado mucho pues a sobrellevarlo, no digo que sí a mejorar pero a sobrellevarlo. A sobrellevar pues el proceso de aprendizaje [Doctor Adriana has been very diligent in supervising me and I have learned a lot of things from her. She has been very strict but she has also helped me overcome the learning process; not to improve it but to overcome it].

She also thought that despite her lack of research skills, her thesis supervisor was very patient with her:

La maestra tuvo mucha o tiene mucha paciencia conmigo, la verdad, es lo que agradezco infinitamente porque si no créeme que ya hubiera soltado la toalla, la maestra (pudo haber dicho) -sabes qué Minerva, búscate otro tutor, otro director porque yo ya no puedo- pero sí, de verdad tiene mucha paciencia y es la verdad lo que admiro de ella y agradezco [The teacher has been very patient with me. I am so grateful for this because otherwise, she could have quit; she could have said –you know Minerva, look for another supervisor because I can't do this anymore- She is really patient and that is what I admire and appreciate about her].

What are the turning points in the process of their research self-efficacy development?

Two events that possibly influenced Minerva in her process as a graduate student were the encouragement and advice from two of her teachers. One of them induced her to participate in the FEL forums because it could give her prestige and increase her curriculum vitae. Since then, she, as an enthusiastic person, has tried to take part in different projects influenced by this idea.

The other event discouraged her from doing a thesis in the BA. Even though she had started her protocol as part of the research seminar course, she took advice from this teacher whom she was working with as an assistant. She made her thought of the possibility of not finishing on time and told her that she eventually would need to do it if she undertook postgraduate studies:

Me dejé guiar por un experto, me dijeron –no, titúlate por promedio, es más fácil, vas a tener tu título. Al igual que si obtienes la tesis y con el promedio va a ser lo mismo pero con más tiempo. Entonces, te sugiero mejor lo otro [I was guided by an expert, I was told –no, it is easier to graduate under the option of qualification of GPA, you will get your degree anyway. If you do a thesis, it is going to take you more time; I suggest you not to do it].

Doing a thesis could have given her more practice to face the MA experience but the workload might also have discouraged her from undertaking postgraduate studies because by that time she was a less confident student.

How have the perceptions of their research self-efficacy changed?

Since Minerva did not complete her BA thesis and the rest of her experiences did not involve much research, she started the MA from zero. She said: “Ahí (en el curso propedéutico) fue mi primer choque porque yo no tenía ningún tipo de habilidad en la investigación y ¡Dios! fue un caos para mí, para mi vida fue así dije Dios mío qué puedo hacer [In the propaedeutics course, I

had my first shock because I did not have any research skills and God, it was a chaos for me, for my life; I said oh my God what can I do?】”.

She has struggled, suffered stress and cried because of a process she has regarded as very difficult: “claro, muy difícil, lo que le sigue de difícil. Sí, de verdad que sí, sí, mucho [Of course, very difficult, more than difficult]”. Nowadays, she feels more confident. Elaborating a research project could be a little bit easier and she might undertake another project in the future if she is asked to:

Pero creo que estos dos años que he estado en la maestría pues me han dado las suficientes herramientas para poder enfrentarme con ese tipo de cosas. Si en un trabajo futuro me dijeran –Minerva, pues necesitas realizar un protocolo- pues no se me haría difícil, supongo que a ver cuál es el tema, buscar los antecedentes, lo que se ha encontrado y a través de eso enlazarlo con una teoría o qué se ha hecho sobre ello, ver las deficiencias en el campo [I believe that after this two years I have acquired the necessary skills to face this kind of things. If I should be asked –Minerva, you need to do a protocol- it would not be that difficult. I guess I would analyze the research topic, I would do the literature review, connect what I find with a theory or see what has been done, observe the deficiencies in the field].

Minerva also recognizes that she has become more critical, she does proof-reading and tries to make her ideas clearer, something that she did not considered before. Nevertheless, when she was asked about her performance during the MA she said she feels that she is still in the middle of the process, she prefers not to say whether she has or lacks the skills: “creo que es un proceso largo y a mí misma no, no puedo decir que tengo... tengo o no tengo habilidades, creo que estoy en un proceso de [I think this is a long process. I cannot say whether or not I have the skills; I am in the process]”.

When she was asked if she considered herself as a researcher she said that she does not consider herself as an expert and would like to have assistance from experts or colleagues in case that she undertakes a new research project. This might be an influence from her personality and

her preference towards collaborative work because she also states that she would like to improve the skills she has acquired with the help of other people.

5.2. Results of Ana

How did self-efficacy sources influence the students' perception of research self-efficacy?

Enactive mastery experiences

Ana majored in English language so in her opinion the first contact with research was at the last semesters in courses such as psycholinguistics and sociolinguistics. She admitted she liked the experience of carrying out research projects, but the most valuable experience she had was her internship as a research assistant to a professor. This professor appears to be an influence in three of the self-efficacy sources. She gave her the opportunity to be involved in the research field before the MA, she encouraged her to undertake tasks that, before meeting her, Ana never thought about and she probably was the biggest influence in Ana to think about being a researcher as a future career. To begin with the enactive mastery experience, this professor also supervised her research protocol in college:

Mi directora de tesis me ayudó mucho, me enseñó muchas estrategias y también trabajé con ella haciendo mi servicio social. Entonces, al hacer mi servicio social fui su asistente de investigación. Entonces, me enseñó mucho en cuanto a la búsqueda de información, en cuanto a discriminar la información adecuada para una investigación, el formato que debe llevar una investigación y todo esto [My thesis supervisor helped me a great deal, she showed me a lot of strategies and I also worked with her doing my internship as her research assistant. She taught me a lot about data searching, about searching appropriate information for a research work, the format of a research work].

Before this experience she was not interested in doing a thesis, she even turned down an invitation to participate in the FONAEEL forum. At the end, she graduated under the option of

qualification by grade point average, but everything she learned as an assistant helped her to face the MA experience; as she constantly mentioned, she learned what the format of a project was and how to do a literature review.

Once she entered the MA she had to decide on a topic. She was inclined to do a certain topic, but since there was not enough literature available she chose the topic her thesis supervisor suggested her: “Fue un poco estresante esa parte porque yo tenía muchas ganas de hacer ese proyecto pero vi que tenía yo más contras que pros. Me iba a ser muy difícil hacer ese tema así que dije más adelante [That was a little stressful because I really wanted to do that project but I weighed up the pros and cons and I had more difficulties. It would be more difficult so I decided to develop that topic in the future]”. Apart from the amount of information, there were more people who could help her and the topic she finally chose was more innovative according to her.

The MA, unlike the BA, was difficult for her. In part, she had to get accustomed to the workload of studying after only working for two years in a kindergarten. Besides, she had to overcome the influence of English when writing in Spanish. Despite all this, she could notice her progress and an increase in her research skills.

Vicarious experience

As mentioned before, working as an assistant was an important experience. This research professor gave her the research seminar course in college and later became her thesis supervisor in the MA. She was supportive and gave her strategies to carry out research. She seems to have acted as a model for Ana to later decide to become a research professor:

Fue para cuando tomé la clase de seminario de titulación porque ella igual fue mi maestra acepté hacer tesis y me empezó a gustar mucho el proceso porque era un tema que me fascinaba y ya luego no lo pude hacer pero ahí fue cuando me di cuenta que me gustaba (la investigación) y fue una de las motivaciones para entrar a la maestría porque dije

quiero ser profesora-investigadora [She was also my teacher in the research seminar course. It was then that I accepted to do a thesis and started to like the process because I really liked the research topic. I could not finish it but it was then that I realized that I liked research. It was one of my motivations to enter the MA; I wanted to be a research professor].

When she traveled to Spain for her research stay she had the opportunity to meet a professor who was working on a similar research topic. She realized how passionate he was about his research and compared how people in that country work with what she had observed in Mexico. She concluded that the research that is done there is more developed and people here lack collaborative work.

Verbal persuasion

Having acquired a good level after studying in a private school, she was constantly told in college that she did a good job:

Sí, mis profesores siempre... no es algo que te digan muy abierto en frente del salón, en frente de tus compañeros pero sí, todos mis maestros me han dicho pues que soy una buena alumna, hasta me da pena decirlo, pero sí, mis maestros siempre me decían que les gusta el esfuerzo que hago. Sí, realmente me lo reconocían [My professors always...they do not tell you this in front of the group, in front of your classmates but yes, all my teachers have told me that I am a good student. I even get embarrassed by saying this but my teachers always recognized my effort, they really recognized it].

Her current thesis supervisor was no exception and also recognized her good performance when they worked together in college. This time, she praised precisely her research skills and encouraged her to do a thesis and to some extent to undertake postgraduate studies:

Yo no tenía ni la menor idea de qué era eso de la investigación, no sabía que me iba a poder gustar porque yo no soy una persona que me encante estudiar, o sea sí soy dedicada pero a veces sí me pesa mucho y como soy muy perfeccionista, a veces tiendo a estresarme para que me salgan bien las cosas. Entonces, sí es un poco difícil pero cuando

empecé con las maestra me dijo -es que eres muy buena para la investigación, deberías seguir con eso- y es una habilidad que realmente no conocía que tenía. Entonces me gustó y fue que opté por eso (tesis en la materia de seminario) [I did not have the foggiest idea about research. I never thought I could like it because I am not the kind of person that loves studying. I mean, I am responsible but sometimes it gets difficult, besides, since I am a perfectionist I sometimes get stressed to get things right. It is a little difficult but when I began to work with the teacher she told me –you are really good doing research, you should continue doing it- and that is a skill I did not know I possessed so I liked it and that was the reason why I decided to do a thesis in the research seminar course].

Finally, Ana considered feedback as important to improve her performance during the master's degree:

Aquí los profesores siempre dan retroalimentación. De hecho cada vez que entregas tareas te las regresan con retroalimentación. Entonces, eso ha sido una ventaja porque a veces entregas las tareas y (en otros lados) ni te dicen nada y te ponen calificación y tú quieres saber bueno que es lo que me salió mal para que yo lo corrija o que te marquen qué es lo que te salió bien para qué lo sigas haciendo de esa forma. Entonces, creo que sí, los maestros de la maestría han sido muy dedicados en esa parte, unos más que otros obviamente pero sí me han ayudado bastante [Here, teachers give you feedback. Every time you hand in your homework they give it back to you along with the feedback. That has been an advantage because teachers from other places give you a grade without telling you anything and you want to know what was wrong in order to correct it or what was right so you can continue doing it. So, I think teachers from the MA have been very diligent in that part, obviously some more than others but they have helped me a great deal].

Physiological and affective states

Ana seemed to be a very capable person; perhaps, she has always been skillful or private education helped her to be a good student. She was prepared for the BA which she admitted was not difficult except for mathematics. Contrary to this, the MA was harder. In general, one of the things that most caused her stress was her own attitude towards study and work; she described herself as a perfectionist:

Siempre tengo ese problema que entrego tareas tarde porque prefiero entregarlas uno o dos días tarde a entregar una tarea mal hecha, o sea va contra mis principios entregar una tarea que no esté a lo mejor no al 100% como me gustaría pero un 70 80%. Entonces, por esa parte sí me estreso mucho. No soy una persona que -voy a hacer la tarea sólo por entregarla y ya- no, no puedo, por más que digo a veces por mi bien, por mi salud lo voy hacer, no puedo [I have always had trouble handing in my homework because I prefer to hand it in one or two days later rather than handing in something badly done. It goes against my principles to hand in homework that might not be at 100% but at least at 70 or 80% as I would like so I tend to stress a lot because of that. I am not that kind of person that –I am going to do it just to hand it in- I can't; even though I sometimes say it is for my well-being and my health, I can't].

She even considered being perfectionist as a disadvantage because she tended to get stressed-out more than normal.

Something that made her stress increase was the fact that she worked and studied. She commented that she did not have to work previously in college. Consequently, it was a little difficult for her to get accustomed to the MA workload after two years working in a kindergarten so once in the MA she admitted she could not handle both things. There was even a moment in which she started to cry, but she did not consider it as an emotional crisis, though, it had never happened to her before:

Llegó un momento en que era tan estresante que yo... o sea hubo un tiempo que yo... no tanto crisis emocional que tuviera que ir al psicólogo ni nada, no, pero sí hubo un día que estallé y que empecé a llorar y a llorar y a llorar y no podía yo parar de llorar y fue algo muy feo que nunca me había pasado porque yo como siempre he sido dedicada y realmente en la licenciatura una que otra materia sí fue difícil pero no la sentí... de hecho los primeros 3, 4 semestres no la sentí nada difícil, hacía las tareas sin esfuerzo [There was a moment in which it was so stressful that I... it was not an emotional crisis in which I had to go to a psychologist but one day I exploded and I started to cry and cry and cry and I could not stop it and that was something really awful. I had never experienced it before because I have always been hard-working and in the BA one or two courses were difficult but... actually, during the first 3, 4 semesters it was not difficult for me, I used to do my homework without any effort].

At some point, the stress that the MA caused her affected her even physically:

Llegué a sufrir mucho, mucho estrés y el hecho de... llegué a bajar de peso, me enfermé, tuve que ir a Mérida para revisión de salud, me tuve que hacer análisis. Entonces en esa parte sí me afectó mucho la maestría. ¡Qué horror! [I suffered a lot of stress, and...I lost weight, I got sick, I had to go to Merida for a medical check-up and clinical analysis so I was really affected in that part. What a horrible thing!]

She finally had to quit her job:

Entonces dije no, voy a renunciar, ni modo. Sí lo lloré porque me gustaba mucho dar clases... ya después de todo lo que sufrí al principio me gustó mucho darles clases a niños y sí los extraño mucho y todo pero por mi bienestar emocional, salud y todo dije no, o una cosa o la otra [Then, I said no, I am going to quit. I cried because I liked giving classes...after all I suffered at the beginning I liked giving classes to children and now I miss them so much, but I had to do it for my emotional well-being and health, it was one thing or the other].

After quitting her job she did not feel a lot of stress from the thesis because she considered she has been working on it respecting the timetables and deadlines. It was also a relief; however, she still dedicated the nights and early mornings to her thesis work because she also found it difficult to concentrate and organize her time.

In regard to the Colloquium, she felt nervous but in this case her personality, that sometimes causes her more stress, helped her to confront this situation:

Estaba muy nerviosa, de hecho creo que fui de las últimas porque yo le dije a mi directora de tesis no quiero ser la primera, entonces me dijo –bueno, te voy a escoger este horario y ya- lo que sí me ayudó bastante es que sí fui muy bien preparada porque te digo que como soy muy organizada [I was really nervous, actually, I think I was one of the last participants because I told my supervisor that I did not want to be the first one so she told me –well, I am going to choose this schedule for you- what really helped me was that I was prepared because as I have told you I am very organized].

What are some particular features that influence the perception of their research self-efficacy?

Ana studied all her life in the same **private institution**. One of the apparent advantages she gained from this is her level of English. Once in college, she even found the first English course boring. Apart from the English courses she took since kindergarten, in this private institution she was expected to deal with all the workload: “no sé cómo sean las escuelas públicas porque nunca estudié en escuela pública pero en la escuela donde yo estudié pues siempre te exigían muchísimo. Entonces eran tareas y tareas y tareas [I have no idea how public schools are because I never went to one of them but in the school where I studied they were always very demanding so I had homework after homework]”. Probably that was the reason why the BA was not that difficult for her. She said: “realmente no me arrepiento (de estudiar en esa escuela privada) porque siento que fue muy fructífero. El nivel que pude obtener me ayudó mucho para entrar a la universidad. Entonces sí me gusto [I don't really regret going to that private school because I feel it was very fruitful. The level I got helped me to get into college so I liked it]”.

Her parents were supportive financially. She mentioned that she did not have to work while in the BA, and now in the MA, they still support her in spite of her scholarship. Besides, they never put pressure on her to be an excellent student. In this case, she, as a **perfectionist**, always wanted to do a good job: “si es algo que me estreso o algo así es por mí y es porque quiero... no es que quiera ser la mejor pero quiero en mis parámetros... pues sí me exijo y digo quiero llegar a ser así [if I get stressed it is only because of me...it is not that I want to be the best but within my parameters I want...I push myself and I say that I want to be like this]”.

Another aspect that could be influential is her **friendship** with one of the other participants: Russell. Ana met this classmate in college and their friendship became stronger during the MA:

La verdad creo que sin él no hubiera sido lo mismo porque, de hecho ahorita lo sufro un poco, porque como estamos en divisiones (opciones de la maestría) diferentes sí lo extraño bastante en las clases pero seguimos en contacto bastante, casi todos los días hablamos, de hecho, pero creo que sí fue un apoyo muy... sobre todo el primer año que fue difícil para todos, que tratamos de apoyarnos no sólo en él sino todos los compañeros [I really think that it would have not been the same without him. Actually, now I suffer a little because we are in different specializations and I miss him in the classes but we still keep in touch, we talk almost every day. I think his support was...specially, the first year that was difficult for everyone in which we tried to support each other, not only him but also the whole group].

Something important is that she felt they were intellectually equal. She constantly said she did not like collaborative work, but it can be seen that she was willing to work with this friend as well as with more capable people such as her thesis supervisor and other professors:

Tiendo a perfeccionar lo que los demás hacen, que no estaba bien, ese defecto que tengo no me permite abiertamente trabajar en equipo. Entonces ésa ha sido una dificultad para mí pero siempre lo he preferido, trabajar sola, desde la licenciatura [I tend to perfect what other people do, which is not right. This fault prevents me from working in team so this has been a difficult thing for me; I have always preferred to work alone, since I was in college].

In the case of this friend, she agreed to ask and receive academic support:

Como ya lo conozco y sé que es muy bueno, muy buen estudiante, siempre cuando tengo dudas en algo, acudo a él. En cuanto a redacción a veces le pido que me revise mis tareas o a veces aunque no eran en equipo nos ayudábamos y las hacíamos juntos aunque no sea de que nos reunamos pero por medio de *Facebook* lo hacíamos [As I have got to know him and he is a really good student, I turn to him every time I have doubts. Regarding my writing, I sometimes ask him to check my homework and sometimes, even though it was not team work, we helped each other; when we could not get together, we used to do it via Facebook].

Finally, her **thesis supervisor** has played an important role during her graduate studies.

As mentioned before, she probably was the model that made her aspire to be a researcher, she persuaded her to do a thesis during the BA even though she did not finish it, and she has taught her a great deal about doing research. Ana added that her thesis supervisor has been supportive

throughout the process of the MA. It seems that they have also built a close relationship in which she now gives her other kinds of support like the emotional one:

Pensé en otro maestro (para ser mi director de tesis) pero realmente siempre he congeniado muy bien con ella, siempre me ha apoyado mucho. Entonces yo quería trabajar con ella y el otro tema pues no había algún especialista que me pudiera ayudar. Entonces sí, ella me ha apoyado muchísimo tanto con la realización de la tesis como con consejos personales. Me llevo muy bien con ella [I thought about another teacher when choosing my supervisor, but I have always got along with her; she has always supported me. Besides, I wanted to work with her and there was no specialist that could help me with the other topic. She has supported me a lot with my thesis as well as with personal advice. I really get along with her].

What are the turning points in the process of their research self-efficacy development?

The **research stay** coincided with the end of the first year of the MA which she considered to be the most demanding. During this stay she could compare how researchers in other countries work with how she had observed they work here in Mexico. She met a researcher who gave her books and articles related to her research topic. At the end, the research stay was more than a mere motivation to travel overseas:

El primer año fue un shock, ya después de que nos adaptamos y me motivó mucho el hecho de que me fui de estancia de investigación, fue algo así como no tanto crecimiento profesional pero también personal, o sea pude hacer cosas que no pensé que eras capaz de hacer, pude explorarme a mí misma, no sé, fue un viaje muy bueno para mí profesional y personalmente [The first year was a shock. We later got accustomed and the research stay was a big motivation for me, it was not only professional development but also personal growth. I was able to do things I never thought I was capable to; I could explore myself. That trip was good for me, professionally and personally].

From that point on, she perceived that the level of difficultness decreased: “eso me ayudó mucho para que el segundo año... me abrió los ojos la estancia. Entonces en el segundo año dije no, ya estaba yo más relajada, ya solo estaba con la maestría, entonces no fue tan difícil [That

helped me a lot during the second year...the research stay opened my eyes. The second year, I was more relaxed, I only had the MA so it was not that difficult]”.

Because of her **internship**, she changed from not knowing anything about research to wanting to do a thesis. She could have done more things as part of her internship but the fact that she decided to be a research assistant to a professor probably was the most important turning point. Before that, she even admitted that her plan was to avoid doing a thesis and to graduate under the option of qualification by grade point average. After all, she had contact with different research skills which helped her to face the MA experience:

Sobre todo lo que más hice cuando fui asistente fue revisión de literatura. Entonces, el hecho de cómo buscar información, cómo discriminar la información adecuada, cómo realizar fichas bibliográficas ¿Qué más? Me enseñó a cómo encontrar los aspectos importantes para que... tú cuando buscas literatura es algo que tienes que saber qué enfoque tiene el trabajo, cuáles son los resultados, el método. Entonces todo eso lo aprendí con ella y fue una base muy buena para cuando yo empecé a hacer mi tesis (de maestría) [What I did the most when I worked as an assistant was literature review so searching for information, how to discriminate it, how to make bibliography cards, what else? She taught me to look for the relevant aspects for...when you do the literature review you have to know what is the reviewed study's research design, what are the results, the method, so I learned all this with her and this was a good basis when I started doing my MA thesis].

Moreover, this professor ended up being her research supervisor in the MA who, as mentioned before, has been a great influence throughout this process.

Another turning point might be her experience **looking for a job** when she graduated from college. She waited two years before entering the MA and meanwhile worked in a kindergarten. At some moment within this period of time, there was a post in the University of Quintana Roo to which she applied but could not get:

Había un puesto vacante y me dijeron -no pues sabes qué, quedaste en segundo lugar. La única razón por la que no te contratamos fue porque no tienes maestría- y el que se quedó sí tenía y tenía más conocimiento del área que necesitaba por la maestría, creo que era un puesto sobre diseño instruccional o diseño curricular, algo así. Entonces, lamentablemente pues no y yo dije ay. Entonces, dije tengo que estudiarla porque yo quiero tener un trabajo seguro, quiero tener una base. Entonces, pues fue por eso más que nada que entré [There was a vacancy post and I was told –you were our second option, the only reason why we could not hire you is that you don't hold a master's degree- and the one that got the post did hold it and he was more knowledgeable about the field because of his MA. I think it was an instructional design or curriculum design post. Sadly, I did not get it so I said I have to earn a master's degree because I want to have job security, I want to hold a position so basically that is the reason why I entered the MA].

How have the perceptions of their research self-efficacy changed?

Even though Ana appears to be a responsible and capable person, there has been a noteworthy change in her if we take into account the fact that at the beginning she was not interested in research at all. Then, while she worked as assistant she gained research skills which she did not know she could acquire. Now, after all the experience of doing the thesis in her MA she thinks that these skills have increased and in agreement with Minerva she regards this as a process:

He mejorado, yo creo pero creo que me hace falta más práctica. Apenas éste es el primer paso, mi primera experiencia con la investigación ya en forma. Entonces, sí creo que he mejorado pero no me considero experta. Creo que me faltan muchos años de práctica para que yo pueda decir experta y no sé si alguien en realidad se puede llamar experto en la investigación. Creo que siempre, como todo en la vida, siempre se va aprendiendo y nunca terminas de aprender [I have improved, but I think I need more practice. This is just the first step, my first and formal experience in research. I think I have improved, but I don't consider myself as an expert, I think I would need many years of practice to be considered as one and yet, I don't know if anyone can be called an expert in research. As everything else in life, you never stop learning].

5.3. Results of Sergio

How did self-efficacy sources influence the students' perception of research self-efficacy?

Enactive mastery experience

Sergio mentioned some courses in his BA that taught him a little about research. However, he waited 5 years before entering the MA so what he learned in college did not help him to face the MA experience. Besides, for practical reasons he did a glossary instead of a thesis to graduate from college so there were no previous experiences in research. He said: “ese conocimiento que tal vez aprendiste en su momento después de alguna forma se olvida. Tuvimos que empezar de cero de nuevo en lo que es la maestría [everything that you learn at that moment is later forgotten. We have to begin from zero in the MA]”.

He assessed his performance as pretty good during the MA and probably that is one of the reasons why he has not considered writing a thesis as something very complicate. Nevertheless, he is aware that there are more difficult approaches:

No hemos encontrado tal vez alguna dificultad hasta ahorita porque la tesis que estoy haciendo es cuantitativa y es exploratoria. No conlleva una teoría, no lleva un análisis tan profundo por medio de una teoría por lo que no ha sido, digamos complicado, pero sí nos ha llevado... sí te demanda tiempo y dedicación [We have not found any difficulty so far because the thesis I am doing is quantitative and exploratory. It does not imply a thorough analysis of a theory so we could say it has not been complicated but it has taken us...it does require you time and comittement].

In regard to effort, he indicated that he works harder when there is lack of ability:

No, lo que trato cuando no tengo la capacidad en algo... siempre trato de solucionar con disciplina y lo que he hecho pues es dedicarme; dedicarme y pues sí, aunque tal vez lo haga mal, sé que voy a recibir la retroalimentación por parte de mi directora y de ahí pues obtendré ese aprendizaje, del error, es el ensayo error, ensayo error [No, what I try to do when I don't have the capacity is...I always try to solve it with discipline and what I have done is to apply myself; to apply myself and despite I don't make it right, I know I am going to receive my supervisor's feedback and I would learn from that, from my mistakes. This is it, the trial and error, trial and error].

He prefers concentrating on one thing at a time. In this case, the master's degree and his job are enough; he feels limited to add a third burden. If he had enough time, he will accept another offer from his supervisor to work on a research project. In fact, he rejected the first one precisely because he thought he could not manage to work on three things at the same time:

El año pasado sí, mi directora me ofreció trabajar con ella pero le dije que estaba muy saturado de trabajo y cuando, pues, sabes que tus limitaciones, pues, a veces prefieres decir que no para no quedar mal y yo eso le dije [Last year, my thesis supervisor asked me to work with her, but I told her that I was overworked and when you know you have your limitations you sometimes prefer not to take extra work so you won't fail them and that is what I said].

Vicarious experience

He always had a good opinion of the English teachers; that brought him to the BA. Then, once in the MA he regarded her thesis supervisor's support as important. He mentioned that, being new to research, the support he receives is significant: "ha sido un poco complejo, pero es necesario siempre trabajar siempre con tu director de tesis porque si no te puedes perder y si no tienes el orden, puede resultar un poco complicado desarrollar tu tesis [It's been a little complex but, it is necessary to always work with your thesis supervisor because otherwise you can get lose and if you are not organized, doing your thesis can be a little complicated]".

Verbal persuasion

What the teachers from the Committee told him served along with his grades to confirm the good performance he had during the MA:

Sí, las calificaciones han sido la base (para calificar mi desempeño) y yo creo que igual los maestros del Comité. Creo que tienen esa visión mía por lo que me han comentado. Otros maestros que igual trabajan conmigo me han dicho eso, que sí hay una buena imagen mía de lo que soy, de cómo soy en la maestría [Yes, the grades have been the base to measure my performance as well as the teachers from the Committee. I think they have this perception of me because of everything they have told me. Other teachers that also

work with me have told that indeed there is a good perception of me, of who I am in the MA].

Additionally, as it was mentioned before, he also relies in the feedback he will receive from his thesis supervisor to correct his work.

Physiological and affective states

He barely talked about stress or emotional crises caused by the thesis in the MA: “alguna vez sí sufrí estrés pero no fue por la tesis, creo, fue por una tarea que fue muy amplia pero no, por la tesis no, no me estresaba tanto [I suffered stress once but it was not caused by the thesis. I think it was because of some homework that was extensive but I did not stress that much because of the thesis]”. Religion seems to play an important role to avoid stress. He said that, in all aspects of his life, praying helps him to calm down. Moreover, he said that hanging out with his classmates reduced stress a little; he never developed a strong bond with them though.

What are some particular features that influence the perception of their research self-efficacy?

Sergio described himself as a quiet person and always described his relation with his classmates, teachers and students as appropriate; one of his classmates even referred to him as a reserved person. In contrast to this personality, he showed an **interest toward social phenomena** since he was in college. He stated that he is interested in communal living and his thesis is precisely about communal living in school. To have a passion for a specific topic probably makes research as a more enjoyable and less difficult activity for him:

Bueno yo creo que siempre desde la licenciatura me gustaba la materia de metodología, realizar trabajos acerca de, pues, de cosas o fenómenos que afectaban en ese momento la sociedad. De repente te dejaban hacer –investiguen algo acerca de un fenómeno que afecta a la sociedad, la pobreza, la delincuencia juvenil- siempre me llamaba la atención investigar acerca de eso ¿Por qué? O ¿Qué sucedía? Yo creo que desde la licenciatura [Well, I think that I have always liked the research methodology course ever since I was in college. I liked to do projects about the things or phenomena that affected society at that moment. I was assigned homework –research about any phenomenon that affects society: poverty, juvenile crime- It always drew my attention to research about that, why? Or what happened? Ever since college, I think].

Having known that he could elaborate a project related to a social phenomenon as violence, he felt more encouraged to do the master’s degree. He is also interested in continuing researching about these topics: “sí, me gustaría investigar más acerca de la convivencia, ese tema me llama mucho. Me gustaría realizar un trabajo acerca de eso, ya sea aquí o en alguna otra institución donde pueda yo laborar [Yes, I would like to research more about comunal living, that topic is really appealing to me. I would like to do a project related to that, either here or in another institution where I could work]”.

When he **became a practicing Christian** he learned *to be*, to have a title and to respect it, to follow and respect the values that *being a certain person* implies. He thought that when being a Christian you cannot be lazy, irresponsible or undisciplined. In addition, the moral values he acquired prevent him from dropping out of the master’s degree in one occasion and, in general, influenced his good performance throughout the MA:

Te dicen antes de entrar se requiere compromiso, entonces se requiere disciplina y si tú tienes eso pues sí. Si tú das tu palabra yo creo que debes ser íntegro en cumplirla. Nosotros (los cristianos) tratamos de manejarnos siempre en eso con sinceridad y cumpliendo lo que decimos [You are told before entering that commitment is required so it requires discipline and if you have it, you can do it. If you give your word, you have to be honest and follow through on it. We Christians try to always be sincere and keep our word].

Religion not only makes him be more responsible and hard-working but it also serves as a motivation; his biggest motivation to finish the master is God. In fact, he was taught to dedicate what he does to his Lord.

What are the turning points in the process of their research self-efficacy development?

Even though he had the influence of his family, it was not until he finished college that Sergio decided to start his **Christian life**. He felt the necessity to go to church after watching a religious TV program. He remarked that his performance during the BA was average; he liked to go out and go to parties which at the end affected his academic performance. Becoming a practicing Christian then consequently improved his academic life:

Bueno, en la maestría yo consideraría, dada la oportunidad que he tenido de hacer un cambio en mi vida. Yo te decía que era menos dedicado, era un estudiante promedio. Ahora sí debido a mi formación religiosa entonces sí creo que sí mi vida cambió poco, bueno no un poco, yo creo que en giro radical a lo que era yo antes y sí me he dedicado con más disciplina a hacer las cosas en la maestría, en la educación y yo consideraría que ha sido de muy bueno hasta ese momento [Well, in the MA I think that given the opportunity that I have had to make a change in my life. I was telling you that I was less hard-working, I was an average student. Now, due to my religious formation I think my life has changed a little, well, not a little, I think I have made a radical change compared to what I used to be and I have been working with more discipline in the MA, in education and I would consider my performance as good so far].

His **passion for communal living** and related topics were important in the decision to enter the master's degree. He said he had not given it a lot of thought but finding out in one of the informative sessions that he could work on one of these topics during the MA was a trigger:

Ese día (del curso propedéutico) pues llegó igual la maestra, la directora de tesis con la que estoy trabajando ahorita y dije no pues este es mi tema. Abrió un tema ya sobre violencia y dije no pues por eso voy, y eso como que me animó un poco más para entrar definitivamente [The day of the propaedeutics course, the teacher arrived, the one whom I am working with now. She started talking about a violence topic and I said that is what I

am going to do, that is going to be my topic; that encouraged me a little bit more to enter the MA].

How have the perceptions of their research self-efficacy changed?

Sergio began from zero when he entered the MA; he said that he started learning research since the propaedeutics course. However, he regards this as a process. He does not consider himself as an expert. In fact, he will need an expert's help if he undertakes a research project:

En coordinación con alguien más sí podría contribuir en algo pero realmente se necesita que haya un experto en el campo de la investigación y nosotros sabemos poco pero no, bueno al menos yo no me considero con esa capacidad de poder realizar un trabajo de investigación por mi propia cuenta, tendría que tener a alguien que me apoye, alguien que me asesore y con quien pueda compartir ideas e ir mejorando en el campo de la investigación [I could make a contribution in coordination with someone else but it would be really necessary to be an expert in the field of research and we know only a little, well, at least I don't think I have the capacity to carry out a research project on my own. I would need someone who supports and supervises me and with whom I could share ideas and improve in the research field].

He added that in order to improve his research training he will need practice and further studies:

Yo creo que el campo de la investigación es muy amplio. No puedo ser un investigador. Yo considero que sé un poquito, muy mínimo y eso que nos hemos dedicado desde que comenzamos la maestría, casi dos años ya. He aprendido ciertas cosas de la investigación pero yo creo que el término investigador es muy amplio, que tendría que hacer, realizar un doctorado para tal vez llegar a ese nivel [I think the research field is very extensive; I cannot be a researcher. I think I know a little and we have been doing this since we started the MA, almost two year ago. I have learned certain things about research but I think that being a researcher implies many things, I would have to do a doctorate to possibly reach that level].

5.4. Results of Mariela

How did self-efficacy sources influence the students' perception of research self-efficacy?

Enactive mastery experience

Mariela thought she did a good job in her BA protocol but could not finish it, partly because she did not organize her time. Besides, she was discouraged by the expenses: she wanted to have access to the graduation discounts and start working as soon as possible. As a result of not finishing her thesis, she considered she did not have enough experience in research.

What could be regarded as her major source of previous research experience is the period of time she worked as a research professor in the Universidad Intercultural Maya de Quintana Roo(UIMQROO), which is located in Morelos. There, she worked collaboratively in some projects and, although she did not finish them, she contributed in her small way:

Colaboré en proyectos tanto de investigación como de vinculación. También bajamos proyectos básicamente de vinculación para que... por ejemplo participé en un proyecto en donde se fomentaban actividades de la cultura maya, otros proyectos y los llevamos a cabo con los estudiantes, con los maestros, la comunidad. Muchas cosas hicimos allá [I worked on research projects and linkage projects. We basically did linkage projects to... for example, I participated in a project in which we promoted activities related to the Mayan culture. In other projects we worked along the students, the teachers, the community. We did a lot of things back there].

Unlike the BA, where she only participated in the first FONAEEL, in the UIMQROO she had a lot of experiences in conferences and symposiums both internationally and nationally:

Fue en Morelos cuando empecé a ir a los congresos y a los simposios y a presentar alguna cosa, me acuerdo que fui a los Estados Unidos a presentar un ensayo que hice sobre la enseñanza de la lengua maya. Y también fuimos a Mérida a presentar avances de la investigación que estábamos haciendo, a Tabasco. En Ensenada también fui. En Ensenada no fui como ponente, nomás fui como asistente, pero sí fue ahí más que nada cuando empecé a asistir a los congresos [It was then, in Morelos, when I started attending and participating in the conferences and symposiums. I remember that I went to the United States to present an essay about Mayan language teaching. We also went to Merida to

present the preliminary results of a project; we went to Tabasco; I also went to Ensenada as an assistant. I basically started attending conferences when I was in Morelos].

It was after this experience that she realized that in the role of a student, symposiums and conferences are not that important. Instead, these events became more important to her, as a research professor, and also sparked an interest on her about academic life.

Once in the MA, Mariela chose an educational innovation project. She thinks her research design is demanding and time-consuming, but she is conscious that every design has its own difficulties. She designed her own instruments and she has found it partly interesting because her research topic is related to the Mayan language.

Vicarious experience

These experiences are related to the UIMQROO the time she worked at the UIMQROO as a research professor. She said that she was guided by her colleagues' experience. Nevertheless, most of them were bachelors or master's holders and hence were not very experienced: "uno podía trabajar en equipo o de manera individual (en la UIMQROO) y como yo no tenía tanta experiencia pues mejor me junté con los que saben [you were able to choose whether you wanted to work in team or alone and since I did not have enough experience I worked with the ones who did so]".

Besides collaborative work, she took advantage of the symposiums and conferences to compare what she was doing to what other people did in other places:

Cuando estás en el área, el papel de investigador, ahora sí pues ya le tomas la importancia (a las conferencias) porque necesitas saber también qué es lo que hacen ellos. Ahora sí que eso también te sirve para medirte tú. Ver qué tan bien estás haciendo las cosas o cómo le estás haciendo con este enfoque, con este otro enfoque o qué otros enfoques hay. Ahí también ves que otros enfoques están trabajando [You begin to consider the importance of

the conferences when you are in the field of research because you need to know what they are doing. That also serves you to assess yourself, to know how good you are doing or how you are doing with a certain approach, with another one and what other approaches exist. There, you can also see what other approaches are used].

Physiological and affective states

Like the majority of her classmates, Mariela worked and studied at the same time during the MA.

In addition to being a student and a teacher, she had to add a third role: being a mother:

En mi caso pues yo soy madre de familia, tengo que cumplir como alumna, por ejemplo, ahorita tengo un grupo, también tengo que cumplir como maestra. Entonces, si uno no sabe combinar los diferentes roles que tiene eso te puede causar un estrés tanto emocional como físico [In my case, I am a mother, I have to fulfill my duties as a student; currently, I have a group so I also have to fulfill my duties as a teacher. So, if you don't know how to combine your different roles, that can cause you emotional and physically stress].

In order to cope with stress, Mariela does not push herself. As a relaxed person, if she cannot hand in a work, she tries not to stress. She assumes there would not be serious consequences even if she fails a course: “si repruebo ni modos, lo curso el otro semestre pero no pasa nada. Es tomar las cosas con tranquilidad. Eso es lo que me ha ayudado [if I fail, there is nothing to do, I will take the course next term but there is no problem. Taking things easy has helped me]”.

Regarding the Colloquium, she had mixed emotions about it:

Cuando empecé a hablar en maya, pues hice todo lo posible para que él (mi papá) también pudiera entender un poco de lo que estaba hablando. Entonces sí me causa cierta emoción digamos en recordar ese momento, una emoción satisfactoria pero también hay emociones estresantes porque ese día tenía que presentar avances de lo que estaba haciendo. Entonces yo no tenía tantos avances porque estaba en ese momento del piloteo del instrumento, no tenía, digamos, como que un resultado tan concreto [When I began to speak in Maya I made everything possible so my dad could understand what I was talking about so that memory makes me feel such a satisfaction. However, that day I also felt stressed because I had to present my preliminary results and I did not have advanced

results because at that moment I was testing my research instruments; we could say that I did not have concrete results].

What are some particular features that influence the perception of their research self-efficacy?

Having been born in an extended family, Mariela had to work since she was in college to make up for the lack of **financial resources**. This in part acted as a deterrent to write a thesis in the BA, which at the end could have been a significant experience. She wanted to take advantage of the graduation discounts and avoid all the thesis expenses:

Entonces mejor yo por eso opté por titularme de una vez, si lo dejo, corro el riesgo de no terminarlo (la tesis) y también de que me va a llevar más tiempo y si me titulo ahorita pues de una vez tengo mi título, me meto a trabajar y ya no tengo ningún problema. Entonces por eso opté por titularme por promedio [I opted to graduate once and for all because otherwise I might have not finished it or else taken more time to do it. By getting my degree I could start working without any problem so that is why I opted for the grade point average option of qualification].

Maya was also significant in her academic life. She learned it in her hometown since she was a child and took some courses in college, but she did not learned how to read and write it until she was at the UIMQROO. Speaking Maya is what precisely gave her the chance to work there; they were looking for someone who spoke both English and Maya:

Otra cosa que aprendí de la carrera que dije es algo que ha impactado en mi vida es el hecho de darme cuenta que la carrera no sólo me sirve para enseñar inglés sino también para maya, porque yo siempre he dicho -voy a hacer algo por mi cultura- pero a veces uno no encuentra cómo, entonces pues yo en mi experiencia profesional ya ves que la carrera se presta para hacer muchas cosas con maya [Another thing that I learned in college and that greatly impacted my life was realizing that with the BA I could not only teach English but also Maya because I have always said that I want to do something for my culture but sometimes you don't know how. So, in my professional experience, as you can see, you can do a lot of things with the Mayan language].

Once in the MA, she chose a topic related to Maya to work on her thesis:

Entonces como te digo, yo enseñé maya, hay muchas cosas de las que carecen los maestros de maya. Entonces una de las cosas es material, por eso mi tesis se enfocó en eso. Fue un poco difícil que el Comité lo acepte pero al final lo aceptaron. Mi tesis es sobre maya [So, as I taught Maya, I noticed there are a lot of things that Mayan teacher lack and one of them is the materials. That is why my thesis is focused on that. It was a little difficult to get the Committee to accept it but at the end, they did. My thesis is about Maya].

She said that every time she talks about her thesis she feels inspired. Falling in love with her topic, as other participants mentioned, most likely makes the thesis work less demanding. She likes what she has been doing and she expressed her desire to continue carrying out research about Maya. This could also be part of her will to contribute to her culture.

Two last influential aspects could be **being a mother and having a family**. Needless to say, she includes her family in every important decision she makes and sometimes places them before anything else:

Dejé la plaza por cuestiones personales, como te digo, estoy casada, mi esposo vivía acá (en Chetumal), mi hija se me enfermaba mucho. Y la plaza, un trabajo de profesor de tiempo completo es muy exigente y yo prácticamente estaba en la escuela de nueve a nueve de la noche casi, como la escuela estaba empezando pues era mucho trabajo que a uno le cargan y ahora sí que como mujer yo me las vi difícil. Generalmente en un matrimonio el hombre es el que sale a trabajar, en este caso yo me fui y mi esposo me iba a buscar y me llevaba y me traía y era un ajeteo muy desgastante. Entonces mejor lo dejé y dije voy a regresar a Chetumal, hago la maestría y tal vez encuentre alguna mejor opción ahí [I left my position due to personal reasons. As I told you, I am married, my husband lived here in Chetumal and my little daughter was constantly getting sick. And the position, a full-time job as a professor is very demanding and I practically was in the university twelve hours a day. Since it was a new university you were assigned a lot of work and as a woman it was really hard for me. In general, in a marriage the man is the one who goes to work. In my case, I was the one who went out and he took me from place to place and it was a bustle. So I quit and I said I am going back to Chetumal, go for the master's degree and probably I will find a better job there].

As it can be seen, the beliefs about women and their responsibility with their family carried a heavy weight to leave her position. Finally, her academic life has influenced her motherhood as well:

Entonces yo trato de enseñarle (a mi hija) tanto maya como inglés, que si le leo algún cuento que sea más crítica sobre la situación, no tanto que sólo se aprenda el cuento sino pregunto el porqué, por qué suceden las cosas. Entonces de alguna forma también la maestría me ha hecho ver esas cosas. Me ha hecho darme cuenta de lo que sucede y me gustaría que mis hijas pues sean más críticas en ese sentido, que no se dejen llevar solo por lo que les dicen [I try to teach Maya and English to my little daughter. If I read a story to her, I want her to be more critical about the situation; I want her not only to learn the story but to ask why things happen. So, in some way, the MA has made me see things in a different way. I have realized how things are and I would like my daughters to be more critical in that way; I wouldn't like them to be carried away by what they are told].

What are the turning points in the process of their research self-efficacy development?

Mariela started **working at the UIMQROO** after sending an e-mail asking for any job vacancies because her situation in Chetumal after graduating was not satisfactory. They were looking for someone who speaks Maya and English and she was a good candidate; as she said, it happened almost by chance. Once there, she held a post as a research professor. Even though she might have not been prepared at that moment, she had the opportunity to be involved with the research profession. This experience later encouraged her to undertake graduate studies:

Entonces te das cuenta que allí tienes que leer más, tienes que saber más y también por eso es que decidí hacer la maestría, porque yo necesitaba, sentía que necesitaba esa preparación para poder hacer mi trabajo, sino no lo podía hacer, pero dejé la plaza [So, you realize that you need to read more, you need more knowledge and that is another reason why I decided to do the master's degree, because I felt I needed that training to do my job, otherwise, I could not do it. Anyways, I left the post].

Another aspect that could have been influential in her research self-efficacy is the **modification in how she evaluates** her academic performance. As a more mature way of thinking, in the MA she began to base her performance on her learning rather than on her grades:

Yo creo que en la maestría es otra cosa, o sea no es tanto la calificación. Tú te das cuenta. Tú sola te das cuenta si estás aprendiendo o no, si entiendes lo que lees o no, si cumpliste con lo que te piden en el ensayo o no. Yo lo sé. Claro, yo cuando mando un trabajo, si lo hice rápido, sé más o menos dónde están mis errores, dónde están mis fallas y cuando lo evalúa el maestro a veces coincide, a veces él ve otras cosas pero uno sabe en términos de la calidad del trabajo que hace o en términos del aprendizaje que uno tiene. Ahí es como uno mide si es que te se está yendo bien, si está yendo mal. Ahí es otra cosa [I think that the MA is different, not everything is about the grades. You know whether you are learning or not, whether you understand what you read or not, whether you meet the requirements you were asked in the essay or not. Of course I know it. When handing in homework, if I did it fast, I know more or less where are my errors, my faults and when the teacher grades it, it sometimes coincide, other times he sees other things but in terms of quality or in terms of the learning you have, you can know how well or bad you are doing. In the MA, it is different].

How have the perceptions of their research self-efficacy changed?

As the majority of the participants, Mariela did not finish her thesis in the BA but she had a valuable experience holding a research professor post:

Me di cuenta (cuando trabajaba en la UIMQROO) que me faltaba mucho para aprender, sobre todo en investigación porque un profesor-investigador tiene que hacer investigación pero si tú no sabes cómo hacerlo, yo sabía más o menos porque nos dan en la licenciatura pues seminario de titulación o metodología, más o menos te dicen, tienes ideas pero no es suficiente [When I worked in the UIMQROO I realized I needed to learn more things, specially about research because a research professor has to carry out research but if you don't know how to do it, I knew more or less how to do it because in college you take courses like research seminar or research methodology, you have a little idea but it is not enough].

Nowadays, she thinks she has learned how to carry out research but she feels her knowledge is limited to her research design. She said that doing a doctorate could help to complement her training: “me considero buena (para investigar), sí. Tengo idea de los diseños de

investigación pero no puedo decir que soy experta en todos. Puedo hablar de mi particular diseño de investigación pero no puedo decir mucho de los demás [I consider myself as good to carry out research. I have an idea of all the research designs but I cannot say I am an expert in all of them. I can talk about my own research design but I cannot say much about the rest]”.

5.5. Results of Andrea

How did self-efficacy sources influence the students’ perception of research self-efficacy?

Enactive mastery experience

Andrea majored in foreign affairs so she did not take courses such as sociolinguistics and psycholinguistics in which she could have done research projects. Instead, she took three seminars courses in which she had to develop her protocol, similarly to what is done in the MA. In fact, she was the only participant that wrote a thesis to graduate from college.

Overall, the thesis was easy because she enjoyed it, she was motivated. However, she found some difficulties and she attributed them to the lack of continuity of research courses in college. She took methodology of research in the first semesters and then the research seminar courses until the eighth semester.

Apart from the thesis, she had two more experiences in college: she was taken to Mexico City to interview some professors from the UNAM and the COLMEX about how they did research and what options of qualification they had, and she was invited to give talks in the research seminar courses from the government and public management bachelor’s degree. Teachers from that bachelor degree sent her e-mails to ask her to talk about her professional experience working with teenagers and also about her research topic or another project she had

done. Even though those talks were focused most of the time on her professional experience she felt that she learned how to speak in public and lose stage fear.

Despite her thesis and these previous experiences, she did not feel she acquired all the skills necessary to face the MA:

Yo creo que (en la maestría) pude concretar (las habilidades de) lo de investigar, el de analizar, el de buscar información, el de discriminarla. Yo creo que lo logré aquí porque te digo en la licenciatura sí lo haces pero pues muy superficial lo que logras hacer. Las exigencias igual no son muchas. Aquí en la maestría pues es el triple de exigencia y que lo tienes que hacer bien [I think that in the MA I could develop my research skills, my analytical skills, my data searching and discrimination skills. I did it here because in the BA you got it at a very superficial level; it is not very demanding. The MA, instead, is three times more demanding than the BA and you have to do things right].

As stated, she constantly mentioned that she is reinforcing the data discrimination skills.

As a result of the apparently difficultness of a master's degree, there were even moments in which she wanted to quit, something she did not suffer during the BA:

(La experiencia de la tesis) Ha sido como que una mezcla de todo. Me refiero a que por ejemplo cuando inicias, estás bien entusiasmado porque es tu tema y porque hay cosas relacionadas con los que te gusta. Poco a poco estás en el proceso, estás investigando pero te encuentras con limitantes de que una, no sabes escribir, dos, no se entiende lo que dices, tres, tienes que expresarte mejor. Entonces vas como que deteniéndote. Digamos son cosas pues no tan preocupantes porque se pueden remediar pero sí llega un momento en que dices hójole ya no quiero... terminar esto (sic) [ya no quiero continuar con esto] [The experience of doing a thesis has been a combination of many things. For example, when you begin, you are enthusiastic because it is your topic and there are things related to what you like. Eventually in the process, you are doing research and you come across some difficulties: you don't know how to write, your ideas are not clear and you need to express yourself better. So you start to slow down. These things might not be alarming because they can be fixed but there is a moment in which you say I don't want to continue doing this].

Once in the MA, she continued being invited to give talks in the research seminar courses, but she refused to present the results of the MA thesis because at that moment she did not have a

clear idea of what subject to work on. Besides, she tries not to undertake more projects, to add more workload because, having a child, it is complicate.

Vicarious experiences

Andrea has had the influence from different models: her older brother, some teachers from her MA and her thesis supervisor. She said she has learned to be responsible from her older brother who is very organized and that some professors have taught through their example to be disciplined, organized and committed to one's topic.

In regard to her thesis supervisor, she stated that selecting your thesis supervisor plays an important role in the MA and in her case that seems to be true:

Mi director de tesis, siempre lo he dicho, el doctor Miguel, he aprendido muchísimas cosas de él, además de que es una eminencia. Lo que me ha enseñado lo que he aprendido y eso ya es muchísimo porque tú puedes decir es un maestro de verdad, lo aprendí, me está explicando y así lo estoy captando. Y digo micro y macro política, para que tú puedas entender eso hay muchas cosas de trasfondo. Él es la persona con la que sí me identifico bastante, déjate de que ya me peleé con él y eso pero bien, sanamente [I have always said that I have learned many things from my thesis supervisor; he is a prominent figure. Everything he teaches me, I learn it and I am talking about micro and macro politics and in order to understand that, there are many things involved and that is already enough; you can say that he is really a teacher. I identify with him a great deal despite the arguments we have had; of course, there have not been serious consequences].

There was also a comparison to her classmates. She felt at a disadvantage when reading in English because, even though she knew a little, she was not prepared for the degree of difficulty of academic readings. Furthermore, at the Colloquium she noticed their classmates had more advanced results. In order to overcome these situations she worked collaboratively with her classmates to understand those readings and she has been working harder with her supervisor in her thesis.

Verbal persuasion

Andrea had a difficult time when she entered the MA and found out that the teachers did not provide as much motivational words as the ones from college. She had gotten accustomed to be encouraged during the BA. In the MA, instead, she was scolded when she did things wrong.

What she appreciated was that in both cases, teachers induced students to speak their minds and to think by themselves. The difference, again, was that she would have preferred the teachers from the MA to be friendlier. She was conscious that it was a higher level and that perhaps because they are researchers they do not necessarily need to have the affective part:

Hasta el momento yo no he recibido una palabra de aliento de que -échenle ganas, ya casi acaban- ellos son muy directos y llegan ahora sí que a hacer su trabajo, a enseñarte -tómalo o déjalo- así de simple. Entonces, mi director de tesis; así es. Son como que un poco fríos en ese sentido[So far, I have not received any words of encouragement, anything like -make an effort, you almost finish- they are very straightforward, and they come to the classroom to do their job, to teach -take it or leave it- that simple. So, my thesis supervisor and the rest of the teachers are a little cold in that aspect].

She found all the motivation that her teachers did not provide in her friends and family instead. She and her classmates used to encouraged themselves in the difficult times and she is also pleased that her classmates recognized her effort. She mentioned that one classmate praised her calm attitude when giving talks. In addition, her brothers and her husband have motivated her to finish both the BA and the MA.

Physiological and affective states

As part of being a mother, Andrea might be more prone to suffer stress. In fact, she sometimes mentioned her child and her role as a mother as added difficulties to the workload of the MA:

Como te digo, te enfrentas a como que... llegas a tu casa y no sabes ni qué tienes, o sea estás preocupado por entregar una tarea, el trabajo de mañana, tu bebé que te está pidiendo algo, o sea cosas como que todo se mezcla y dices no, ya, creo que voy a dejar la maestría o voy a salirme de trabajar porque esa fue una de las propuestas que me hicieron los maestros pero o sea imposible, no, y como que es un choque de emociones pero digo yo creo que si las sabes cómo que canalizar y platicarlas llegas a estabilizarte y decir voy a salir de esto, o sea no pasa nada, nada más extérnalo... [You face...you arrive home and you don't even know what is the problem, I mean, you are worried because you have to hand in your homework, the work for the next day, your baby who is asking you for something. I mean, everything is combined and you say no, I think I am going to drop out or stop working because that was one of the suggestions the teachers made me but that was impossible. There are mixed emotions but I think that if you know how to get it off your chest you ... and start saying I am going to overcome this. I mean, it is not a big deal, just express it]

Precisely, what she mostly did to cope with stress was to express it when she had a problem. Getting it off her chest was always a relief to her and this was part of her personality. This is something that she learned from her family; they always told her to talk with the person that caused her stress. Furthermore, and as part of her personality, she tried to take it easy. Even though she even failed a course once, she looked at the bright side; for her, there cannot be major consequences.

Finally, during the Colloquium, she experienced nervousness even though she did not demonstrate it:

También vivir la experiencia de cómo estaban mis compañeros de nerviosos o no tanto así. No digo que a mí no me pase, o sea me dicen muchas personas -oye es que a ti casi no se te notan los nervios- les digo no, tal vez porque no los demuestro pero por dentro estás algo nerviosa [I also had the experience of seeing how nervous my classmates were. I am not saying that does not happen to me. Many people tell me -you don't seem nervous- and I tell them that maybe I don't show it but I am a little nervous]

What are some particular features that influence the perception of their research self-efficacy?

Andrea was pregnant during the last year in college and her child's birth coincided with the beginning of classes in the MA. **Her pregnancy** was no excuse to drop out of college and probably overcoming this situation made her feel more confident in her capacity. At least she said that she might have been an inspiration for other students:

Estuvo bien complicado. De hecho me decían pero cómo, o sea pues no es por halagarme pero decían los profes -cómo es posible que ella con su panza viene así y no se desanima y lo termina y todo- no sé, a lo mejor fui ejemplo para muchos. Era lo que yo les decía, aquí no hay de que si tú te embarazas no puedes terminar porque no es cierto, ahí está el ejemplo, ¿no puedes?... (Claro que) sí se puede. Otros -es que trabajo y estudio- ¿y qué? yo trabajé y estudié y además estaba becada, o sea imagínate, o sea el esfuerzo de que aplícate porque si no te quitan la beca y es un ingreso más, o sea algo más [It was complicated. Actually, I don't want to flatter myself but the teachers used to say -how is it possible that she comes to classes in that condition without losing hope and she manages to finish it- I don't know, maybe I was an example for many of them. I told them that getting pregnant was no excuse for not finishing school, that was not true, I was an example of that, can't you? Of course you can. Some people said -I work and study- so what? I worked and studied and besides, I had a scholarship. I mean, imagine all the effort, I had to apply myself because I could lose my scholarship and that was an extra income].

She said that she has received the support of her family to take care of her child but, despite this, it has been difficult to combine the workload of the MA with her duties as **mother**:

(Mi desempeño) regular. Regular porque te digo, o sea no soy una alumna que... se me es complicado y más porque ahorita el tercer factor es mi bebé. Entonces a veces yo llego y él está despierto. Entonces tengo que jugar con él, tengo que estar con él y hasta que se duerme me siento a hacer tarea. Entonces sí se me triplicó la chamba [My performance was average because as I told you I am not that kind of student that... it is complicated for me and especially now that I have my baby. I sometimes arrive home and he is awake so I have to play with him, I have to be with him until he falls asleep and then, I can do my homework. So my workload has tripled].

What are the turning points in the process of their research self-efficacy development?

Andrea first studied English language during one year but dropped out, moved to another state and came back one year later. This time she opted to major in **foreign affairs**. Working with and getting to know those **professors** very likely influenced in the rest of her academic life because she described them as demanding but encouraging. For example, she learned from them to feel satisfied with her projects because at the end, she is the expert in her topic. Now, in the MA, she feels more confident when talking about her research topic. Moreover, they always included the affective part in their teaching to which she got accustomed; now she wishes she had it in the MA.

As a result of that encouragement, she was the only participant who wrote a thesis to graduate from college:

La razón fue porque nuestros profes, te digo, nos hacían esta comparación -si ustedes van a pedir trabajo a algún organismo internacional o nacional o en cualquier parte van a ir a dejar sus documentos y si hay alguien que tenga monografía, tesis, por calificación, por eso, saben a quién van a ser a los que van a elegir- y nosotros pues sí, al que hizo investigación por tesis -exacto jóvenes, si ustedes no hacen tesis pues como que te quita- o sea, no digo que no sea importante sino que hay un mayor peso. Entonces ésa fue una de las razones por las que me animé a hacer una tesis [As I told you, the reason was that our teachers made this comparison –if you apply for a job in an international or national organization, or any other place, you leave your documents and if there is someone else who did a monograph, a thesis, who had GPA, do you know who is going to be chosen?- yes, the ones who did research because of the thesis –that’s right students, if you don’t do a thesis it takes away- I mean, I am not saying that it is not important but it carries a heavy weight. So, that was one of the reasons why I did the thesis].

Her **thesis** could be considered as a valuable experience prior to the MA but she also mentioned how everything she learned in college was superficial. Then, once in her graduate studies, she has reinforced and developed new skills but it seems that she has been doing this

through the two years of the master's program. It could be described as a gradual process in which no event seems to be as influential as others.

How have the perceptions of their research self-efficacy changed?

Despite all the experiences she had in college, Andrea thought that what she learned about research was only superficial. Then in the MA, she felt she reinforced her research skills and overcame the workload in spite of the added difficulties such as her job and being a mother. After all this, she could undertake another research project as long as she has the assistance from experts:

Yo creo que ya tengo las bases suficientes para poder hacerlo (un proyecto de investigación). Siempre, siempre cuando hago algún proyecto, no de investigación un proyecto, en general, siempre he acudido con el profesor o profesora que tiene las respuestas hacia ese proyecto porque aventarme yo sola a hacerlo no, te digo, esto lo vas adquiriendo durante el camino y ahora sí que lo vas fortaleciendo también pero aventarme yo solita a algo importante, no me aventaría [I think I have the basis to undertake a research projec. Everytime I do a project, not only a research one but in general, I always turn to the teachers that have the answers to that project because I would not do it alone. You acquire and improve all this on the way but I would not embark on a project by myself].

She feels she has done a good job with her thesis but thinks that in order to be a researcher she will need more practice. As other participants have mentioned, this can be seen as a process in which through practice she will be able to polish her research skills up.

Finally, as a person who is about to have written two theses, one for her BA and other for her MA, Andrea prefers field work. She would rather be a professor than a researcher. She mentioned that if she had the possibility to carry out a research project, she would like to work on the research topic she has developed through the BA and the MA.

5.6. Results of Russell

How did self-efficacy sources influence the students' perception of research self-efficacy?

Enactive mastery experience

Russell could not graduate under the option of qualification by grade point average; his second option then was a translation. He did it because he knew it would not be as complicated as a thesis. Besides, he mentioned four courses that included research during college: sociolinguistics, psycholinguistics, research seminar and regional issues; he did research projects in three of them and was taught some general concepts about research. Nevertheless, he did not connect what he learned in the BA to what he has been doing in the MA:

La verdad yo no creo, pero tiene que ver mucho con que yo sabía que no iba a investigar. Yo sabía que no iba a hacer tesis en la licenciatura. Entonces yo no lo tomé muy en cuenta, igual y ahí sí nos dieron las herramientas y todo eso. Yo ya sabía lo que constituía hacer una tesis, los pasos que se llevaban, que se seguían para hacer una tesis, eso sí lo supe desde la licenciatura pero no fue algo trascendental para mí. Hasta que llegué a la maestría fue que supe realmente que es lo que tenía que hacer, como lo tenía que estructurar todo eso pero no creo que haya habido una influencia de lo que aprendí en la licenciatura con lo que estoy haciendo ahora en la maestría [I knew that I was not going to do research, to write a thesis and that is why I never had it in mind. Anyways, we were given the tools in the BA. I already knew what doing a thesis implied, the steps to be taken in order to do it. I learned all this in the BA but it was not significant for me. It was not until I entered the MA that I really learned what I had to do and how I had to organize everything, but I don't think that what I learned in the BA influenced on what I am doing now in the MA].

He was also invited to participate in the FONAEI but rejected the proposal because of lack of interest.

In his own words, his performance during the BA was not outstanding but good. In general, he had gotten good grades throughout all his academic life and probably could have continued that way in the MA if he had not experienced some personal issues. Then, in the second year of the MA he assessed his own performance as poor:

El primer semestre (mi desempeño fue) bueno. Bueno, voy a ser sincero. Mi primer semestre siento que fue excelente, me gustó mucho como trabajé. Estaba yo muy motivado en el primer semestre de la maestría, pero ya para el segundo bueno, tercero y cuarto pésimo, muy malo, ya mi desempeño en la maestría. Bueno, no quiero justificarme pero influyeron muchas cosas, me enfermé, cosas así y ha sido un desempeño pésimo [In the first semester my performance was good. Well, I am going to be honest, I feel that my first semester was excellent, I liked how I worked. I was really motivated in the first semester of the MA but then in the second, third and fourth it has been terrible. Well, I don't want to make any excuses but there were a lot of things, for example, I got sick. It has been a poor performance].

He did not consider the thesis as a difficult work. Those personal issues contributed to diminish his performance but under other circumstances, Russell believes he would have had the capacity to do it without much effort. What he thought he needed to change was his attitude. For example, he had problems to concentrate every time he had to work on the thesis. At some moment when he was behind with his work he thought he could finish it in a few months, though, he was aware of this overconfidence.

Two more research experiences that he had in the MA were the presentation of a project in the university as part of his work as a language teacher and the opportunity to go on a research stay to France. There, he participated in a project related to his thesis in which he applied what he had learned in the MA.

Vicarious experience

Mostly, the good opinion he holds about the MA comes from what he thinks of the teachers. He said that they have a high level of quality and he has built an idea of how a master in education holder must be according to what he has seen in them. He showed admiration for most of them and mentioned that he felt motivated to work with those teachers because of their knowledgeableness:

Todos los profesores han tenido una influencia desde que empezó la maestría. Hubo unos con los que no he congeniado mucho y otros con los que sí, pero sí, todos han tenido una influencia. Hay unos que yo te podría decir que sí son así como... pues como que el ejemplo a seguir... yo siento que son como que la imagen de la maestría. No hay que decir que los otros no, pero pues son como el emblema... que me han marcado, por ejemplo la maestra Adriana para mí es así como que “investigación” si tengo que poner de referente a alguien en investigación yo la pondría a ella [All the teachers have been influential since the beginning of the MA. I have got along with some teachers and haven't with others but anyway all of them have had an influence on me. I could even say that some of them are like... a rolemodel ... I feel that they are the image of the MA, we should not say that the others are not but they are like the symbol; they have left their mark on me. For example, teacher Adriana is like “research”; if I had to choose an example of a researcher I will choose her].

During his research stay he also had the opportunity to participate in a project similar to his research topic. He could interview the professor in charge and he considered that talking with a researcher doing the same research was an enriching experience.

Verbal persuasion

Having been a good student and done a good job during the first year of the MA, Russell have been appraised and encouraged by his classmates and teachers about his performance. However, he said those opinions do not affect the poor image he has lately had about his work:

Ellos siempre han tenido una postura en la cual siempre me han apoyado, me han tratado de motivar para que sobrelleve esto, que salga adelante y todo. Pues no, ellos no influyen en esta imagen que yo tengo. Esto es algo que yo he detectado y que yo sé [Their stance has always been one of supporting me, they have tried to cheer me up to overcome this and go on but no, they don't have an influence of what I think about me, this is something I have noticed and I know].

Physiological and affective states

Russell mentioned that the BA was not that difficult for him; whenever he did not feel comfortable with a task or a subject he just tried to comply with them and avoid stress. It was

until the MA that he began to worry and suffer apprehension. In fact, he went through a severe emotional crisis.

He said that during the MA he had two jobs. The workload caused him stress and anxiety, but his crisis started when it was combined with his internal problems such as the pressure he had been putting on himself to be perfect since he was a child. In his own words, the MA alone did not trigger this crisis:

Todas esas presiones que yo me metía a mí mismo se vinieron acumulando, se vinieron acumulando, se vinieron acumulando y metí una más, la maestría. Me tenía yo que presionar porque la maestría también tenía y ya no aguanté pero no culpo a la maestría, no es la maestría, es todo lo que venía atrás y la maestría como que llenó el vasito y se desbordó [All the burden I put on me began to increase, to increase, to increase and then I added one more, the MA. I worked under pressure because of the MA and I couldn't stand it anymore, but I don't blame the MA, it was not the MA. It was everything I already had and the MA was the straw that broke the camel's back].

He sought professional help and could overcome this situation to some extent; however, he now associates the thesis work with that negative experience:

Siento que es una reacción psicológica o algo, no sé si solo me estoy justificando pero apenas digo me voy a sentar a hacer algo, me voy a poner a hacer mi tarea, me voy a poner a concentrarme a hacer mi tesis como que me entra un sentimiento de ansiedad, como que algo que me dice no lo hagas [I think that it is a psychological reaction. I don't know if I am only making excuses but as soon as I try to concentrate on my thesis homework I began to feel anxiety, as if something told me not to do it].

What are some particular features that influence the perception of their research self-efficacy?

Russell always wanted to be one step ahead. In concordance with his attitude, he took a **French** course in the BA which for several reasons he failed. As a result of this bad experience he undertook the challenge to master that language and consequently ended up falling in love with

the language, the country and its culture; he even remarked that he likes it more than English.

This gave him the opportunity to work in France for almost a year as a Spanish assistant:

Me abrió mucho la mente, la forma de pensar. Veo las cosas de manera distinta. Soy un poquito más tolerante en ciertos aspectos y más intolerante en otros. Me ayudó a comparar cómo se vive aquí, cómo se vive ahí pero también me ayudó mucho a comprender el porqué de las cosas aquí. Antes yo no entendía porque la vida aquí era...no sé, era muy intolerante con la gente pero ir ahí me hizo darme cuenta de muchas cosas. Entonces ya ahorita veo las cosas de manera distinta [It opened my mind, it changed my way of thinking. Now I see things in a different way. I am a little more tolerant in certain aspects and a little less tolerant in others. It helped me compare how life is here and there and it also helped me understand why things are in a certain way here. Before that, I didn't understand why life here was...I don't know, I was very intolerant of others but being there I realized many things so now I see things in a different way].

When he came back to Mexico after this experience he entered the MA and chose to go back to France on his optional **research stay** and worked with the same people he had known before. In this occasion, he could apply what he had learned about research during the MA. Fortunately, his research topic was similar to what he encountered in the stay:

Hice una estancia de investigación en Francia. Entonces colaboré con un profesor investigador ahí. Él estaba poniendo en práctica lo que yo vine y puse en práctica aquí. Entonces yo colaboré en la intervención educativa. No colaboré en la elaboración de la metodología, en la revisión de todo eso, no colaboré. Simplemente en la puesta en marcha [I went on a research stay to France and I worked with a professor there. He was doing what I was doing here so I collaborated in the educational intervention. I was neither involved in the revision nor in the methodology, just in the intervention].

As mentioned before, his **internal problems** affected him severely to the point of wanting to drop out and leave everything. Among all these personal issues he indicated that he was taught to always do his best since he was a child. In addition, personality aspects such as ego and pride made him put more pressure on him. This, in the long run made him leave aside the personal aspect. This emotional crisis was the cause of the poor performance he obtained in the second

year of the MA and as he constantly remarked the workload of the thesis barely contributed to the crisis itself:

Es que tiene que haber un balance y yo no tuve ese balance. O sea si yo iba a estudiar una maestría, debí bajarle a mi nivel de estrés, a mi nivel de trabajo, debí también buscar momentos de esparcimiento desde antes. Es que yo no encontré el balance, o sea uno no puede porque no somos máquinas, uno tiene que alimentar también la parte espiritual, la parte personal y no únicamente eso. Entonces fue la maestría lo que activó todo eso pero no es culpa de la maestría, o sea igual si yo hubiera encontrado otro trabajo, ese otro trabajo iba a hacer lo mismo que hizo la maestría [One must find a balance and I didn't do it. I mean, if I was going to do a master's degree I should have reduced my levels of stress and my workload. I also should have found some moments of relaxation before doing this. The thing is that I didn't find the balance and we are not machines; one cannot leave out the spiritual and personal part. So, the MA activated this but I don't blame it, if I had found another job, that job would have done the same as the MA].

As it can be seen, he often commented that it was not the right moment to undertake graduate studies. One of the worst consequences of this emotional crisis was the suicidal thoughts it caused him:

Cuando yo empecé con eso me llegué a sentir tan mal que a veces decía ojalá me duerma y nunca más despierte, o que yo salga a la calle y me atropellen, así si me atropellan y me muero no me va a poder reclamar que no entregué mi tarea. Sería la única forma de escaparme de esto decía [There was a moment in which I felt so bad that I sometimes wished I fell asleep and never woke up again or that I a car ran me over. I used to think that if I died because of the car or something else no one could demand why I didn't hand in my homework; it was the only way to avoid all this].

As expected, he looked for psychological help and in part he could fight this crisis. However, he claimed that he has not fully recovered from it and he is afraid to relapse. Besides, as an effect, now working at home causes him stress and apprehension.

Apart from the psychological assistance, one of his MA classmates supported him during this crisis. They met each other in college so by the time they were in the second year of the MA they already had a strong **friendship**. This classmate not only encouraged him to overcome his

situation but also provided academic support. They had similar personalities that prevent them from working collaboratively, but since they thought they were at the same intellectual level, they did not mind helping each other by checking their homework.

What are the turning points in the process of their research self-efficacy development?

Despite the difficult situations he had endured by the end of the first year of the master's degree, Russell partly recovered and had two pleasant experiences in which he could see the fruits of his labor. The first one is the **research stay** in which he could apply what he had learned so far about research and also served as a motivation and a contribution to his research topic:

La estancia que tuve... pues yo me daba cuenta que no estaba únicamente de observador sino que contribuía ya porque pues yo ya tenía los conocimientos, ya estaba contribuyendo y también tuve la oportunidad de entrevistar a un maestro que ha hecho investigación sobre esto y también, pues eso, el hecho de estar hablando con alguien que hace la misma investigación y todo eso pues también es enriquecedor, es algo muy grato [In the research stay I had to... I could notice that I was not only observing but also making a contribution because I already had the tools; I was making a contribution. I also had the opportunity to interview a teacher that has done research about all this and talking with someone who does research on the same topic like yours is very rewarding, it is something very pleasing].

The second experience is the presentation of his advanced results in the **Colloquium** in which he saw the rewards of his thesis work and felt connected to the MA:

Pues me sentí alumno de la maestría, investigador, más o menos. Y pues las subí a Facebook esas fotos. Como que estar en la maestría y estar en un coloquio te da como que cierto estatus, todo mundo decía –uy, investigador- que yo a veces ni me la creo pero sí me trae buenos recuerdos, no tengo ningún mal recuerdo [Well, I felt like a master's-degree student, more or less like a researcher; I uploaded the pictures to Facebook. It seems that doing a master's degree and being in a colloquium gives you certain status, everybody said –wow, researcher- and I sometimes can't believe my ears but it brings back good memories; I don't have any bad memory of that day].

How have the perceptions of their research self-efficacy changed?

Russell had recognized that he did not bring much research knowledge from the BA because he was not interested at that moment. After the several courses he took in college, he had a slightly idea of how to write a thesis, but it was not until he entered the MA that he learned specifically how and what to do:

Cambió un poco (mi tema de investigación) porque en ese tiempo o sea yo no conocía de metodología de la investigación, ni de diseños de investigación y nada de eso. Entonces yo sólo tenía la idea de lo que quería hacer -teatro para enseñar lenguas- pero pues ahora ya sé que lo tuve que hacer por medio de una intervención educativa, por investigación-acción, que tuve que hacer entrevistas, que tuve que grabar, que tuve que hacer todo eso [My research topic changed a little because by that time I didn't know about research methodology, research designs or anything like that; I just had the idea of what I wanted to do –teaching languages through theater- but now, I know that I had to do an educational intervention, it was action research, I had to conduct interviews, I had to record, I had to do all that].

Before the MA, he did not have the motivation to carry out research and now he would be able to undertake a research project but, in concordance with most participants, he would need assistance from someone with more experience:

Primero tendría que terminar la que estoy haciendo, pero sí, sí me sentiría preparado para hacerlo (llevar a cabo una investigación). Obviamente necesitaría ayuda, guía pero sí, me siento preparado. No me sentiría con la autoridad para ayudarle a alguien a hacer una investigación, o sea para decir yo voy a dirigir tu investigación. Con esa autoridad yo no me sentiría pero para orientar y guiar un poquito sí [Firstly, I would have to finish the one in which I am working on now but I would feel prepared to carry out a research project. I would obviously need assistance but I do feel prepared. I don't think I have the authority to help someone else do his research, I mean, I would not lead someone else's project but I could provide some guidance and orientation].

In addition, he expressed that he would prefer to carry out research related to his teaching and added that he would not like to work under pressure again, contrary to this thesis in which he

has deadlines and timetables. He believes that, as a professor, he could solve the problems that arise in classroom by doing research because both professions are complementary.

5.7. Results of Mary

How did self-efficacy sources influence the students' perception of research self-efficacy?

Enactive mastery experience

Mary majored in commercial systems. As well as Andrea she did not take courses such as psycholinguistics and sociolinguistics. Nevertheless, her BA prepared her to some extent to do quantitative research. She reported that she did a lot of marketing research, administered questionnaires and analyzed numbers and statistics.

As most of the participants, she wanted to continue with her protocol and finish her thesis but did not conclude it, in her case, because she wanted to focus on the MA. She might not have had the thesis experience but at least as a result of her BA, she felt comfortable with the quantitative design and did not consider it too difficult. What was complicate and new about her thesis was the subject: education. She expressed that she has gradually overcome this situation by reading.

She said that she had to put more effort in the first semesters because they were the hardest. She even neglected her work in a junior high school on account of her studies. Even though she was aware of this hard work she would confront, she had the confidence to embark on this project:

Sí tenía idea (del trabajo de maestría) porque algunos familiares ya la habían estudiado antes y sí me habían comentado. O sea la palabra que siempre han usado y que yo creo que la voy a usar cuando recomiende la maestría es “demandante”, la maestría es demandante. Te demanda tiempo. Si eres una persona que crees que no lo puedes hacer, o sea no puedes hacerlo mejor ni te metas porque la vas a sufrir mucho pero si eres tenaz y

constante pues... y ya me habían comentado mis dos familiares. No es difícil, no es algo así con lo que no puedas pero pues sí te demanda tiempo, porque te demanda tareas, te demanda cosas que tienes que poner mayor énfasis. Entonces yo tenía así como que una idea más o menos de lo que podía ser la maestría y pues tomar el riesgo nada más [I did have an idea of the workload of the MA because some relatives who had studied it told me about it. The word that they used and I think that I am going to use as well when I recommend the MA is “demanding”, the MA is demanding; it requires you time. If you think that you don’t have what it takes to do it, you’d better not enter because you will suffer but if you are tenacious and persevering, well... and my two relatives had already told me. It is not impossible but it requires you time because there is a lot of homework and there are a lot of things in which you need to put more effort. So, I had a slight idea of the MA and I just took the risk].

One more difficulty she faced during the MA was her low level of English caused by the two years that she had passed without practicing the language but she also managed to overcome this situation. She said that she has increased her level with the help of a friend and especially through reading, and this is a plus she has obtained from the MA:

Yo creo que también es una de las habilidades que en la maestría desarrollé, ya leo muchísimo más rápido en inglés. Yo creo que ni la licenciatura me había dado esa oportunidad de leer. Yo creo que sí, eso igual es una habilidad que desarrolla en la maestría, la habilidad de leer en inglés textos. Pues no son cualquier texto, son textos con lenguaje académico [I can read a lot faster in English and I think that is one of the skills I developed in the MA. I am not talking about any kind of readings, they are academic readings. I had not had this opportunity of reading, not even in college].

Vicarious experience

Since she was not required to obtain a higher level of English language in her BA, she felt at a disadvantage when they had to read in the classroom because she struggled to understand and consequently read at a slower pace. In order to cope with this, she used to work with one of her classmates who gave her strategies such as contextualizing. In general, she also compared to her classmates when handing in homework:

Tal vez me exijo mucho, por eso es que a veces me siento muy presionada y digo no, es que lo pude haber hecho mejor y al final de cuentas (tu tarea) sí cumplía con todos los parámetros de tener una buena nota pero como siempre me comparo con los demás que sí tienen todo el tiempo de hacer sus tareas pues es que digo lo pude haber hecho mejor, lo pude haber hecho mejor. Por eso es que a lo mejor yo sola calificó mi desempeño mal por eso. Porque me comparo con los demás. Siempre, siempre la competencia ante todo, pues uno busca competir para ser el mejor y siempre me comparo con los demás [Maybe, I push myself harder and that is why I sometimes feel stressed and I think that I could have done my homework better but in the end I did meet all the requirements to get a good grade. I think that I could do a better job because I always compare with others. Maybe that is why I regard my performance as bad, because I compare with them. One always wants to be the best and I always compare to them].

One more person whom she has compared to is her eldest sister. She did a PhD so Mary thinks that she could also do it. In fact, she is one of her biggest motivations to earn her master's degree and later continue with her postgraduate studies. Her sister has also been academically supportive; she helped her with her writing by giving her strategies and by checking her homework. Besides, she gave her links and bought her an APA book in Spanish.

Verbal persuasion

In regard to the verbal persuasion, Mary commented that many times she expected lower grades in her homework but her professors gave her good ones instead. In part, this misjudgment occurred because she used to push herself. In addition, some relatives told her that the MA was demanding but everything was possible with effort.

Even though she had a good relationship with the whole group in the MA, there was a classmate with whom she developed a stronger bond. Among the benefits of this friendship she received academic help in relation to her English level and she helped that friend in the writing process of her thesis as well. Besides the fact that they used to did homework together, they persuaded each other:

Minerva también ha influido mucho en mi desempeño porque siempre ambas nos estamos dando motivación cuando vemos que una ya va a tirar la toalla –sí, tú puedes y da el 100- y siempre ambas o lloramos juntas cuando no podemos hacer algo o nos reímos ante algo. Siempre nos estamos dando motivación una a la otra y en general todo el grupo es así [Minerva has also influenced in my performance because we always motivate each other when one of us wants to throw in the towel –you can do it, give the 100 %- and we always laugh or cry together when we cannot do something. We are always motivating each other and in general, the entire group is like this].

Physiological and affective states

As it was mentioned before, the first semesters were the most difficult; she even cried and wondered if it was worth it:

Obviamente hasta llegó un momento en que yo decía -o sea no, no voy a matarme para estudiar una maestría- yo lloraba, lloraba muchísimo los primeros semestres, decía –no, yo veo que otros- obviamente entras a tus redes sociales y ves a todos tus compañeros egresados de la carrera en fiestas, en viajes y yo lloraba yo demasiado pero decía no, tendrá una recompensa pues al final [Obviously, there was a moment in which I said –I am not going to suffer like this to study a master’s degree- I cried, I cried a lot the first semesters. You check your social networks and you see that all of your classmates from college are in parties or traveling and I cried a lot but I used to say that there would be a reward at the end].

Mary added that one of the regular causes of stress was her thesis corrections. In fact, the thesis stressed her to the point of wanting to drop out:

Yo creo que todos, todos, todos en el primer semestre dijimos ya no puedo, primer y segundo semestre, ya no puedo, ya no puedo, no sólo por las tareas sino por el estrés de una tesis y todo eso. Te estresa demasiado que dices no, ya no puedo, o sea en qué momento decidí meterme esto. Ya nada era motivación para uno, ni una beca, nada, nada era motivación. Por supuesto que nada era motivación. Yo creo que el primer semestre y prácticamente el segundo que todos, todos dijimos así nos vamos a salir, es que ya no aguanto y todos tuvimos nuestro momento de ya no quiero hacer tareas, ya quiero salir, o sea te das cuentas que tus amigos se empiezan a alejar de ti porque ellos salen todos los sábados y tú no. Yo creo que eso es lo que te empieza a desmotivar. Y dices ya no, voy a salir, qué hago aquí [I think that in the first semesters all of us of said that we could not do it anymore, it was not only the homework but the stress from the thesis and all that. You get stressed to the point of saying no more, I can’t do this, when did I decide to do this? Nothing was a motivation, not even the scholarship, absolutely nothing. I think it was the first and second semesters in which all of us said that we were going to quit, we couldn’t

stand it. All of us had a moment in which we didn't want to do our homework, we wanted to get out. I mean, you realize that your friends begin to turn away from you because they go out every Saturday and you don't. I think that is what discourages you and then you say what am I doing? I am going to go out].

What are some particular features that influence the perception of their research self-efficacy?

Even though **her BA** did not give her the necessary training in English language or on the education field, it did prepare her to face some of the requirements of quantitative research:

Mi licenciatura digamos que siempre involucraba la investigación porque como es todo de ventas siempre tienes que hacer una investigación para ver qué producto puede funcionar o que servicio. Entonces, siempre te hace salir al campo, aplicar encuestas, muchas encuestas. Prácticamente yo creo que un 70 u 80% lo manejamos con cosas cuantitativas, números, estadísticas, pues prácticamente todo lo hacíamos así, ir a aplicar encuestas a ver si va a funcionar, ver otros productos, analizar. Entonces sí implicaba mucha práctica de campo y hacer investigación al respecto [Due to it was about selling, research was an important part of my BA; you always had to carry out research to know what products or services could work, you always had field work in which you had to administer surveys. I think that practically 70 or 80 % of the work was quantitative: numbers, statistics. Practically everything was about administering surveys to know which products could work, to analyze. So, it implied a lot of field work and doing research about it].

After having been sick for a long time, **her father** passed away while she was in the midst of her BA. It unquestionably affected her performance in the last part of her BA but she managed to recover to some extent by the time she entered the MA:

Cuando yo entré a la maestría pues ya habían pasado dos años de la muerte de mi papá. Ya habían pasado dos años y no te voy a decir que no me afectó, obviamente me seguirá afectando por el resto de mi vida pero pues siempre es una motivación, que pues digo cuando ya siento que voy a tirar... más que nada en el primer semestre de la maestría que ya sientes que vas a tirar la toalla, que ya no buscas tu tema de tesis, que hacer, que voltearlo, donde buscar información, pues siempre tienes que buscar una auto-motivación, algo [When I began the MA, it had been two years since my father's death and I am not going to say that it didn't affect me, it will obviously affect me for the rest of my life but he will always be a motivation. When I feel that I am going to... especially in the first semester in which you feel that you are going to throw in the towel, that you can't find

your research topic, don't know what to do or where to find information, well, you always have to find that self-motivation, something].

In part, the motivation he gives her comes from the moral commitment she made. When he laid on his deathbed, she promised him that she would earn her bachelor's degree and to undertake graduate studies. She added that every time she is going to work on her thesis she burns sandalwood incense to cope with stress because this scent reminds her of her father.

Mary described herself as a sociable and talkative person. Probably her personality was the reason why she was the only participant that mentioned the importance of the **group's support**. For her, it might have been more significant all the activities that involved everyone's participation such as the group activities, the birthday celebrations in the classroom, their Facebook group, the jokes and the mutual encouragement:

Unos nos motivamos a otros, todos pasamos por un momento en el que dijimos ya no quiero la maestría y siempre había en el salón algún compañero que te echaba la mano, te motivaba, el grupo sí fue muy unido, pienso yo que como casi todos somos de la misma edad por eso es que nos comprendemos mejor. Si a lo mejor tuviéramos compañeros muchísimo más grandes pues no, no nos comprenderían pero casi todos somos de la misma edad [We motivated each other, we all had a moment in which we did not want to continue in the MA and there was always a classmate that gave you a hand, that motivated you. The group was very close. I think that we understand each other better because almost all of us are the same age. If we had much older classmates this may not be possible but almost all of us are the same age].

One last aspect that could be influential is her **family support**. In addition to the support of her eldest sister, who provided her with academic help, she received a lot of support from her mother and other sister who lived with her in the same house:

Mi mamá, mucho, muchísimo me apoyaba porque pues a veces yo me dormía hasta las 7, 8 de la mañana y tenía que ir a trabajar a la una de la tarde que es mi hora de entrada. Entonces mi mamá me cuidaba mi hora para dormir, se despertaba -ya despierta- cuando yo me despertaba ya tenía la comida, o sea me facilitaba mucho, muchísimo la vida mi mamá en ese aspecto y pues mi hermana en muchas cosas [My mother supported me a lot

because I sometimes went to bed at 7 or 8 in the morning and I had to go to work at 1pm. So, she looked after me, she woke me up and prepared the food so I could eat before going to work, I mean, she made my life easier in that aspect and my sister helped me in other ones].

Her sister's assistance consisted of running errands for her and, as well as her mother, she supported her financially when it was necessary.

What are the turning points in the process of their research self-efficacy development?

Mary was suggested to major commercial systems because it fit her personality. She would have probably continued with that career if she had not had a stroke of luck: she was working in the library department of a junior high school when she had the **opportunity to give some classes**.

Even though that was completely different from what she was studying she could not turn down such opportunity. At the end, this first contact with the students produced on her love for the profession and the concern to specialize that brought her to the MA:

Pero luego dio la coyuntura de que tuve la oportunidad de entrar a trabajar a una escuela entonces la carrera que yo había estudiado ya no casaba con la educación, entonces para que yo creciera dando horas y volviéndome docente pues tenía que estudiar algo que me alineara a la docencia y pues además de que yo quería estudiar un posgrado y pues yo dije tengo que estudiar algo y vi la maestría en educación y dije pues voy a estudiar ésa [But then I had the opportunity to work in a school and what I had majored had nothing to do with education so in order to develop as a teacher I had to study something related to education. Besides I wanted to undertake graduate studies so I found out about the master's degree in education and decided to study it].

As part of the master's program, she had the possibility to go on a **research stay** in summer. This experience was a significant motivation for her and seemed to have occurred to her on time after the hardship of the first year in the MA:

Cuando tuve la oportunidad de irme a una estancia de investigación a España yo creo que fue la pieza clave en seguir en la maestría y yo me hice esa promesa -no me vuelvo a quejar porque la misma maestría me hizo cruzar del otro lado del mundo y me dio esa

oportunidad de conocer gente, me dio esa oportunidad de conocer lugares [I think that the key aspect to continue in the MA was the opportunity to go on a research stay to Spain. I promised never to complain again because the MA gave me the opportunity to get to the other side of the world, to meet people and to visit places].

Two of the benefits she gained from the stay are that from that moment on she has worked with more enthusiasm and that she made contacts there.

How have the perceptions of their research self-efficacy changed?

Mary can compare her work before and during the MA and notice her improvement; especially her academic writing has gotten better as a result of practice:

Yo recuerdo que los primeros escritos que tengo de mi tesis son... los leo y ahorita ya hasta me dan risa porque digo -como pude haber escrito esto así, ni se entienden las ideas- pero pues obviamente se da con la práctica [I remember that my first writings from my thesis are... now I read them and they make me laugh because I say -how could I write something like this? The ideas are not even clear- but you obviously get this with practice].

Apart from her writing, she has improved her information searching skills. She recognized that in college she used to do simple search; now she does more complex search and is more conscious of the reliability of the information on the web. In general, she feels that she is better prepared to carry out research:

Haciendo una comparación como era antes. Sí, (me siento) muchísimo más eficaz (para investigar) porque pues tengo mejores estrategias de búsqueda de información, mejor redacción, comprensión de textos etcétera. Yo creo que sí, haciendo comparación con lo que tengo de la licenciatura muchísimo más eficaz y competente [If we compare how I was before with the present, I feel much more prepared to carry out research because I have acquired better data searching strategies, better writing and comprehension skills, etc. If we compare with what I got in the BA, I feel much more efficient and competent].

Even though she admitted that the theoretical framework was the hardest part of her thesis, she started liking research after doing the field work, when she corroborated or refuted the theory. Mary would undertake a research project as long as she is acquainted with the topic and obtain economical and curricular reward. Finally, she added that she would like to apply for a post in a university in which she might be ready to do both research and teaching.

5.8. Overall findings

Out of the 7 participants, only Andrea wrote a thesis in college; the rest of them had different research experiences, some more valuable than others, but in the end, they were not prepared to face the MA experience. They seemed to be capable students since 4 of them graduated by grade point average and the other two did not perceived their monographs as difficult but, as it is expected, the degree of difficulty of a higher step in education was a challenge even for the more responsible and industrious.

Table 2: Option of qualification in college and reason why they did not choose a thesis

Minerva	Ana	Sergio	Mariela	Andrea	Russell	Mary
Grade point average	Grade point average	Monograph	Grade point average	Thesis	Translation	Grade point average
She was persuaded not to do it	Because of the time	Practical reasons, he had already chosen the monograph	Expenses and time	-	A thesis would have been more difficult	To focus on the MA

In addition to Andrea, which wrote a thesis and had other opportunities, Mariela, Ana and Mary had specific research experiences as it can be seen in table 3.

Table 3: Research experiences prior to the MA

Minerva	Ana	Sergio	Mariela	Andrea	Russell	Mary
Active participation in the FEL	Internship as an assistant	English language courses only	Research professor post at the UIMQROO	Thesis	English language courses only	BA activities: administering questionnaires and analyzing numbers and statistics

With regard to the other experiences that could have prepared them for the MA, the students that majored in English language did not take advantage of the FEL. Mariela participated once and only Minerva had an active participation; however, she took part giving workshops. Ana, Sergio and Russell were invited but mentioned that they were not interested by that time. In addition, they said that in courses like linguistics and research seminar they either learned only a superficial part of research or they had forgotten by the moment they entered the MA.

Participants reacted differently to the stress caused by the MA and the thesis but one normal reaction some shared is that they had a moment in which they had to give vent to their emotions by crying as seen in table 4.

Table 4: Consequences of stress and workload

Minerva	Ana	Sergio	Mariela	Andrea	Russell	Mary
She cried when she was scolded	There was a moment in which she burst into cry	-	-	She felt like crying when she arrived home	Severe emotional crisis	She cried the first semesters
She left home for 8 months	She quit her job					She questioned if it was worth it

The most affected participant was Russell, but, as he mentioned, it was not the MA workload alone the one that triggered his crisis. On the contrary, Sergio, Mariela and Andrea were the least affected. Sergio mentioned that his religion helped him to remain calm, for example by praying. In the case of Mariela and Andrea, even though they had the extra role of

being mothers they had a relaxed attitude towards the workload. Andrea expressed it when she was stressed and Mariela had in mind that any stressful or difficult situation would not last long.

With respect to the thesis supervisors, they played a central role in their process. Most of the times, their importance relied in the strategies they teach students to carry out research. Other participants mentioned the support they provided. In the case of Ana, for example, her thesis supervisor has given her emotional support and she thinks they have a good relationship. Minerva commented that she is grateful for the patience her supervisor has had and that she would like to be like her. Andrea also mentioned a good relationship between her and her supervisor and added that she feels identified with him even though she described him as cold.

The teachers from the MA not only had an influence on their mentees but also on the rest of the participants. Minerva and Ana precisely stated that they did a good job at providing feedback. These two participants could have valued more this because as they said, for them it was very important to know what they were doing right and what could be improved. In addition, Russell showed admiration not only to his supervisor but to the whole faculty. Nevertheless, participants would like some things to be different. Andrea wished they were as friendly as her BA teachers and Minerva remarked that sometimes she could not handle their scolding her.

Apart from their thesis supervisor, participants received support from each other. Specially, there were two bonds in the group that were significant for the four participants involved; they were Minerva-Mary and Ana-Russell. Minerva and Mary got to know each other in the master's program and their friendship was relevant in the way that they supported each other academically. On the other hand, Ana and Russell knew each other since college. Ana, in this case, was important to help Russell to confront his internal problems.

In contrast to what was expected, Mariela and Andrea did not identify with each other. Even being mothers was no reason to create a bond between them. Other differences like

personality might be opposite enough not to permit this. Besides, they are in different specializations so they no longer see each other. Finally, Sergio enjoyed the group company but did not develop a strong bond with anyone, which agrees with his personality.

In connection with their preparedness for future research projects, many participants mentioned that they would need the assistance of an expert or the collaborative work with their colleagues to undertake them. In addition to these conditions, Ana and Russell mentioned that they would carry out a new research project as long as they do not suffer pressure as the one caused by the deadlines; Mary commented that she would like to get some kind of reward like the monetary one; Minerva said that she does not think she would be asked to carry out research in her job; and Andrea remarked that she would prefer to work in the teaching field.

Among the gains in research they mentioned, they have improved their academic writing, they have become more critical, and they do more complex search. Despite all they have learned, one of the most frequently cited remarks was that this is a process; they would need more experience or even to do a doctorate in order to perfect their research skills.

Table 5: Participants' perception about their research skills

Minerva	Ana	Sergio	Mariela	Andrea	Russell	Mary
It's a process	It's a process	It's a process To do a doctorate to perfect his skills	To do a doctorate to perfect her skills	She would need more practice to perfect her skills	It's a process	-

With reference to the turning points, Ana, Russell and Mary mentioned the research stay as influential in their process. Ana and Russell met professors in their stays that worked on similar research topics so they could apply what they had learned as well as receive material for their dissertations. For Mary, on the other hand, the research stay acted more as a motivation; she

regarded it as a reward for the hard work she had been doing. Unfortunately, Minerva and Sergio could not go on a research stay due to different circumstances and Mariela and Andrea did not mention it. They probably did not have the opportunity because they have young children.

One aspect of the turning points that Mariela and Russell did share was that both learned a third language, which gave them some opportunities that otherwise they would not have had. Mariela, for example, obtained a research professor post at the UIMQROO because she spoke Maya, which she learned since she was a child. In the case of Russell, he learned French in college and knowing this language he chose France to go on his research stay. As mentioned before, this is where he put into practice some of his research skills.

CHAPTER 6

DISCUSSION

The findings presented in chapter four will be analyzed taking into consideration Bandura's research self-efficacy and the results from the studies included in the literature review. Besides, the significance of the findings for practical implications will be added as well as some recommendations for further research. This time, the results will be presented and discussed question by question.

6.1. How did self-efficacy sources influence the students' perception of research self-efficacy?

This first research question relates to the four sources of self-efficacy that Bandura identified: enactive mastery experiences, vicarious experience, verbal persuasion and physiological and affective states.

Being the most influential source of self-efficacy, enactive mastery experiences were one of the most common experiences among all the participants. Some of the probably most transcendent experiences prior to the master's degree were Andrea's thesis, Ana's internship and Mariela's professional experience. However, these participants did not seem to have an advantage over the rest of their classmates if we take into account the perceived difficulty of the workload and the consequences of stress and anxiety.

Bandura states that similar experiences will be given more importance, stored in memory and become part of the beliefs of self-efficacy. In the case of Ana and Mariela, the previous experiences might not have raised their self-efficacy and increased their confidence during the MA because, even though those experiences were closely related to the conduction of research,

they did not have enough practice. Those were their first steps into research and it could be normal that they did not become experienced enough overnight. With regard to Andrea, she did have a difficult time but, as well as Mariela, she had the added burden of her child. In spite of all this, she did not suffer because of the workload but because of the affective part. The rest of their classmates had less influential previous experiences. Sergio did not choose a thesis for practical reasons and Mary wanted to focus on the MA; Russell, as well as Mariela, did not choose a thesis to graduate because of the extra difficulty. This can be related to Bandura's theory in that, lacking confidence, people tend to avoid tasks that they consider difficult.

Generally, all those previous experiences did not prepare participants to face the master's degree experience. What could be helpful to overcome this lack of training is the promotion of research in the undergraduate curriculum. Some authors like Unrau and Beck (2004) and Lane, Devonport, and Horrell (2004) have suggested to foster research early in the curriculum but in this context, it is necessary to direct attention to the BA in English language, which was participants' main educational background (5 out of the 7 participants studied it).

As it was described, the BA in English language aims at teaching its students some basis about research. The conduction of research projects in courses like linguistics and the organization of an event like the FEL seem to be congruent with this objective; however, it is important to remark how participants neither acquired the necessary research skills nor the experience. Sergio, for example, said that he forgot everything he had learned by the time he entered the MA and Russell mentioned that he did not perceived that what he did in the BA helped him in the MA process. It appears then that the BA in English language is whether failing at providing enough research experience to fulfil its objectives or is being ambitious in the inclusion of research in its program.

This could be a cause to another problem found in the participants, which was the lack of interest in the conduction of research. As it has been stated before, any of the participants who majored in English language wrote a thesis to graduate. Exceptions to this could have been Ana and Mariela who mentioned how they were willing to continue their research protocols but none of them could make it for different reasons. The indifference showed by the rest of the participants corresponds to the study of Shawm, Holbrook, Scevak, Bourke (2008) in which pre-service teachers were not found to have an interest on carrying out research.

Being the Master in Education a good option to specialize for the English teachers, the fact that some participants do not have an interest in research is worrying due to the relation between teaching and research. For instance, reading articles can provide the necessary update to improve classes. Additionally, action-research is a feasible design for teachers to solve problems that arise in the classroom. What should be done is to raise awareness among both bachelor's and master's students about research as a vital activity in their professional experience. Participants like Russell and Mariela, after almost completing the master's program, were conscious of this by mentioning that they could make use of their research skills to solve problems in the classroom.

These points of view, however, belong only to the participants of this study whose number is very limited. Then, teacher's stances toward research invite further investigation. It could be helpful to know what students from BAs in English language like the one offered at the UQROO think about research because they are most likely to enter this master's program.

With regard to the participants that did no major in English language, they were not only affected by the lack of prior research experience but by their level of the language. This can also be analyzed with relation to the vicarious experience. Participants sometimes compared themselves to their classmates but instead of increasing their research self-efficacy by comparing to classmates with poorer results, they tended to feel at a disadvantage when they were surpassed.

This occurred to Andrea and Mary who majored in foreign affairs and commercial systems respectively and that consequently had difficulty to read in English during the classes.

This raises questions about the level of English that all bachelor's degrees are supposed to offer at the UQROO and about the English test that candidates to the Master in Education are required to take. In the case of Mary, she mentioned how the MA was more helpful for her to improve her level of the language so her bachelor's program might be neglecting the teaching of English. Andrea, on the other hand, mentioned how she learned English by herself and she thought that there should be more courses to improve the level of the language in her bachelor's program. In spite of this, these participants have managed to almost complete their dissertations without a high proficiency in English.

These two participants also compared themselves to their classmates in connection with other tasks. Andrea noticed how she was behind with her work during the Colloquium and had to put more effort to overcome that situation. Mary commented that she always tries to compete and she was aware that it sometimes makes her perceive her performance as poor. With regard to this finding, Jairam and Kahl (2012) had previously suggested postgraduate students to prepare for the inevitable peer competition. Regarding the comparison to role models rather than to competitors, Mary also provided a clear example. Following Bandura's description of the vicarious experience, she said that her eldest sister was a motivation because the fact that she had gotten a PhD reassured her that she can also get it.

The vicarious experience and the verbal persuasion were both found in the figure of the thesis supervisor. The majority of the participants mentioned how the collaborative work with their supervisors and their guidance were important factors in the development of their projects, specially, because they were new to research. Minerva and Ana, for example, valued the feedback they received and expressed a desire to be like their supervisors.

The closer relationship among these two participants and their supervisors was surely the cause of their points of view as supported by studies carried out by Shivy et al. (2003); Shawm, Holbrook, Scevak and Bourke (2008); and Lev, Kolassa, and Bakken (2009). Shawn et al, for example, found out that students with higher self-efficacy and a closer relationship with their supervisors were the ones that might end undertaking postgraduate studies. In the case of Ana, she mentioned the possibility to become a research professor when, before meeting her supervisor, she did not want to write a thesis in college.

In part, it was not only the affective part from her supervisor that motivated her to think about this but also her persuasion. She was actually told when she was an assistant that she had research-related skills. As Bandura predicted, she had the capacity but needed the encouragement from an expert to discover it. The case of Minerva, however, is special because she was prevented from writing a thesis. In spite of her willingness to write a thesis and gain recognition she preferred to follow expert's advice but being a less mature student at that time, this could have helped Minerva not to be discouraged from possible failure.

In some occasions, however, participants did not seem to be affected that much by the verbal persuasion. Russell, for example, was both encouraged and flattered because of his good performance in the first semester of the MA, but that persuasion did not change the poor image he had about himself. This was partly caused by the combination of the high expectations he had about himself and his internal problems. Nevertheless, he did regard the faculty as role models. He precisely mentioned how professors were good at research.

With regard to Andrea, she identified with and admired her supervisor but did not find some aspects like empathy, flexibility and compassion described by Shivy et al. (2003) that belong to the affective part in a supervisor. In addition to this, Moreno (2010), by analyzing doctoral programs, found out that there is always a link between the affective and the cognitive

situations in postgraduate programs; the relation between mentor and mentee is no exception and should also be expected in graduate studies. Coming back to the case of Andrea, it is important for professors to take into account that some students may always be more affected by the emotional aspect.

What supervisors have to say about the affective part and the orientation of students also invites additional inquiry. Some students suffered during the process and demanded a more caring trait from their supervisors, but it will be interesting to find out how professors from graduate programs deal with the emotional aspect when they work with their students and supervise their mentees.

Regarding the last source of self-efficacy information, Bandura mentioned that college students are prone to suffer apprehension and stress because of everything that a higher academic level implies. It should not be unexpected then that a master's degree causes more negative physiological and affective states. In fact, stress was found throughout the entire program.

On the whole, the writing up, the corrections and the presentation of the thesis results were a major cause of stress in the participants. It was then reflected in their emotional crises and in the decisions some made in order to alleviate them. For example, Ana had to quit her job and Minerva decided to move out of home for a few months. Furthermore, Ana and Russell mentioned that they were constantly worried about the deadlines. Stressors related to time limitations had been previously found in a study carried out by Baltes, Hoffman-Kipp, Lynn and Weltzer-Ward (2010).

The workload of the program alone might not provoke strong emotional crises and thoughts about dropping out, but something that all participants had in common was that they had the added burden of a job; two of them were even mothers with young children. This suggests that working and studying at higher academic level is possible but really demanding. Some

reasons why they decided to do this could be that they wanted to keep their positions or did not have other sources of income. In fact, even though they were granted a scholarship, everyone continued working except for Ana, who quit her job in the second year of the program.

Students in master's programs should be recommended to focus on their studies, especially when they have the financial support of a scholarship. Nonetheless, this is not always possible and the ones that are pursuing a research professor career could benefit from this experience. By working and studying at the same time, they get accustomed to the demands that such professional career implies. The students who only want to specialize in teaching, however, would have a difficult time, but they should be warned since the beginning that a program like the Master in Education from the UQROO requires the conduction of research and therefore demands a high amount of time and effort.

6.2. What are some particular features that influence the perception of their research self-efficacy?

One of the most influential features found in this study was the friendship and its benefits among the participants involved. Bandura asserted that peers have certain influence in the development and validation of intellectual efficacy. In fact, the students who developed a strong bond with one of their classmates benefited from the academic help they provided each other. For example, Minerva, who relied on collaborative work, found in Mary someone with whom she shared ideas and did homework together; Mary, in exchange, received help with English. In addition, Ana and Russell felt identified and agreed to work together as well.

Having friends in the program then becomes an important aspect of students' academic success. This finding lends support to the study of Jairam and Kahl (2012) in which they suggest students to align themselves to a small group of academic friends in order to facilitate the process

of completing postgraduate studies. Nevertheless, being alone does not foretell failure. Sergio, for instance, was a reserved student but that did not translate into academic problems. That might be because his religion offers him the support of an entire community outside the program. In the case of Mariela and Andrea, even though they had in common the fact that they were mothers, they did not build a strong bond and did not mind working on their own.

The support from the family was also important. Participants like Ana and Mary commented how they were supported financially. Ana was even able to quit her job to release a little of pressure. In addition, Mariela and Andrea, who were married, had the support of their husbands. The only participant who had troubles at home was Minerva but her parents seemed to understand her after she came back home. This finding was consistent with that of Moreno (2012) who found out that the support of the family was a decisive aspect in the formation of doctorate students.

One particular feature that was found in Mariela and Andrea who had already started a family was the combination of different roles. With reference to this, Bandura (1995) has proposed that a strong sense of self-efficacy have a beneficial effect on coping with multiple role demands. This suggests that these two participants, by combining their roles as mothers, teachers and students should have built a strong sense of efficacy. They even were aware that failing at managing these roles may cause them physical and emotional stress.

Some other particular factors that Bandura described as important in student's self-efficacy are the level of cognitive ability, prior educational preparation and attainment, and attitudes toward academic activities. This is closely related to Ana's performance. Having studied in a private institution, she developed the capabilities to carry out research-related activities in her internship. In addition, her personality as a perfectionist made her apply herself in every activity

she undertook. This performance made her supervisor recognize and praise her skills.

Nonetheless, these skills and her cognitive ability did not lessen her affliction in the MA.

The fact that she regarded the process as difficult could have partly been caused by the underestimation of the task. As Bandura stated, some people might judge accurately their self-efficacy but underestimate or not know the task demands. Russell and Andrea, as well as Ana commented how they had not struggled in college so they probably did not expect the workload of the master's degree. Minerva also had a difficult time because of her misconceptions about the workload in the MA; by thinking that a quantitative project and that the writing process did not require much effort she may have had a hard time when she faced reality.

Another aspect that is related to reality and that was found in some participants was the affective and motivational benefits of optimistic self-efficacy beliefs. Bandura affirmed that realists may adapt to the situations but optimistic people are likely to change them by investing the necessary effort to accomplish their objectives. Among some of the goals that participants set were the fact that Ana wanted to have job security, Sergio wanted to dedicate his work to God and be a good Christian and Mariela wanted to contribute to her culture by doing a project related to Maya. These motivations allowed them to continue even in the face of obstacles.

The case of Mary is also worth it mentioning. Having heard about the difficulty of the MA, she mentioned important values like perseverance and determination and took the risk to study it. Bandura precisely described how high efficacious people take greater risks and put more effort when things get difficult. At the end, this is probably why she and the rest of the participants are about to finish the program in spite of all the hardship.

6.3. What are the turning points in the process of their research self-efficacy development?

Among the turning points that were mentioned more than one in occasion, there is the research stay and the Educational Research Colloquium. Russell, for example, felt identified with the master's program during the colloquium and also had the opportunity to meet a professor who worked on a similar research topic during his stay. These events were important not only for him but for the socialization of the other participants because they allowed them to present their results in front of experts in the field of research and to work collaboratively with them, in the case of the research stays. This is supported by Grediaga (2012) who observed how doctorate students become researchers with the help of tactics implemented in their programs such as the presentation of results in both international and national forums.

With regard to the self-efficacy theory, Bandura stated that having repeated success is helpful to develop a strong sense of self-efficacy and that once this occurs, occasional failures will be unlikely to lower the beliefs in one's capabilities. This implies that participants like Russell who succeeded at these events most likely increased their research self-efficacy and will be more confident in future research-related tasks. Then, the program seems to be congruent with its objectives by implementing these events.

6.4. How have the perceptions of their research self-efficacy changed?

In connection with this last research question, participants of this study became confident in carrying out research. The majority of them remarked that they are in a process and that they would need assistance from an expert to undertake a new research project, but this seems to be a gain compared with their perceptions about research before entering the program: for most of them it was unknown and some even avoided a thesis as an option of qualification in college.

Being research a highly demanding activity, they seem to be judging accurately their self-efficacy.

Even though they are not experts, they managed to familiarize themselves with their research designs and to be acquainted with their research topics. This was expected and is also supported by authors like Lambie, Hayes, Griffith, Limbert and Mullen (2013) who studied an educational program. In their study, doctorate students became more comfortable as they had spent more time in the program and performed more research-related tasks. However, they also found that the interest in research was not related to the time spent in a program. These results agree with the case of some participants. Andrea, for example, mentioned that she would prefer to work in the educational field rather than carrying out research. Additionally, other participants were a little skeptical about their institutions asking them to do research and did not appear to be willing to take the initiative.

In spite of the lack of interest, their time in the program has made, in concordance with the objectives of the program, that the participants acquired knowledge and research skills. They seem to have acquired the necessary basis to undertake doctoral studies. Some of them like Russell and Minerva commented that they have already started looking for doctorate programs related to the educational field.

Regarding the research-related tasks, the Educational Research Colloquium was a good tactic as it was previously mentioned in the last research question. As Grediaga (2012) suggested, students socialize in the research field, or in this case they develop their research self-efficacy, by presenting their projects in forums and adapting to handle criticism. A good example of this is how Minerva dealt with what she considered a negative comment in the Colloquium and did not perceive her project as less valuable because of this.

Taking into account that the Master in Education from the UQROO includes in its objectives the socialization of their students into research, events such as the Colloquium are an asset. The requirement of a dissertation to obtain the degree also helps to achieve this goal. However, something that the professors cannot control is the interest of the students toward research. Perhaps, if the faculty focuses on the personal qualities like empathy, dedication, flexibility and patience as suggested by Shivy et al. (2003), students could be drawn into research. In addition, the selection of the candidates should be more rigorous on identifying the candidates who are interested in carrying out research and the ones that do not consider it compatible with their profession.

As it was mentioned before, the opinion of bachelors about research and their professions could be an interesting object of investigation. Additionally, the actual perceptions of self-efficacy in research of candidates and then of graduate students invites further research. Participants of this study developed their research self-efficacy throughout the entire program, but a quantitative approach could measure to what extent the next generations increase their perceived self-efficacy about the conduction of research. It would be interesting to find out what their levels are before, after and across the semesters of the master's degree.

CHAPTER 7

CONCLUSIONS

7.1. Summary

This study aimed to explore the research self-efficacy development in the students from the Master in Education from the UQROO. Seven students from the 2012-2014 generation were interviewed in order to recount some of their experiences related to the research learning in the completion of their bachelor's degree and their master's degree.

Among the most relevant findings, it was discovered that the research experiences prior to the master's degree did not prepare students to face the difficulty of a dissertation in the master level. They did manage to almost complete their theses and educational innovation projects by the time they were interviewed, but that did not prevent them from suffering stress. In fact, stress was found throughout the entire process and some students even made difficult decisions to alleviate it and there was one case of a severe emotional crisis. In part, stressors related to time limitations and the elaborations of their theses were found to provoke these crises.

It was suggested that the lack of experience could be confronted by taking actions in college, but that the BA in English language from the UQROO failed at precisely providing enough opportunities and encouraging their students to be involved in research activities. The importance of this bachelor's program relied in that it was participants' main educational background. It was also suggested that teachers can benefit from including research in their professional experience and that studies concerning their points of view about research and their professional career should be conducted. Additionally, candidates' perceptions about research could be valuable at identifying the ones who are not willing to carry out research and that consequently will struggle in the master's program.

This study has identified key aspects in the completion of participant's graduate studies similar to those found in previous research. Among them, participants mentioned the support from their supervisors, friends and family. It was discovered that the affective part is highly valued for some students, that supervisors can draw their mentees into doing research and that the combination of different roles was important in the case of the participants who were mothers with young children.

It was also found that the Master in Education implements good tactics that help students to develop their research self-efficacy such as the research stays, the presentation of their results in the Educational Research Colloquium and the research sub goals established in every seminar. Students might have had several deficiencies when they entered the program but finally succeeded at acquiring knowledge and research skills. Moreover, they appeared to evaluate accurately their research self-efficacy by not considering themselves as experts. Instead, they were aware of the research learning as a process.

As part of the self-efficacy theory, it was expected that the participants in this study had personal goals that motivate them to overcome difficulties such as the search of a better quality of life. What was interesting was to discover how some of them had unique reasons like being an exemplary Christian, the promise made to a sick father and the willing to contribute to one's Mayan roots. In addition, the proficiency of a third language provided some students with opportunities that otherwise they could not have had to acquire research experiences.

It is suggested that further research should approach research self-efficacy from a quantitative design in order to measure how much students develop their efficacy in the conduction of research. By discovering the amount of increase in students after completing their graduate studies, there could be great contributions to theory and practice.

7.2. Limitations

One of the limitations of this study was the absence of triangulation. The data collection was focused on the students so there was no information about teachers' perceptions of their students' self-efficacy. Students were asked to check the transcriptions of the interviews, but interviewing the faculty could have served as a form of validating the data. Besides, it would have been interesting to know what the professors have to say about the development of students' self-efficacy.

Another type of triangulation could have been to work with a colleague. The involvement of various researchers in this study could have provided more points of view and more objectivity to the analysis of the data. However, this was done, in part, by my thesis supervisor who constantly provided feedback in the elaboration of the study including the data analysis.

The study was further limited by the review of the literature. Even though the studies included were very valuable at supporting the findings, it could have been of greater help to this study if more research focused on educational programs had been found. Among the studies included, some of them were carried out in Mexico, but they were focused on the doctoral level. More studies focusing on the research development of pre-service teachers and teachers pursuing a master's degree could better contribute to the findings of this research.

REFERENCES

- Baltes, B., Hoffman-Kipp, P., Lynn, L., & Weltzer-Ward, L. (2010). Students' research self-efficacy during online doctoral research courses. *Contemporary Issues In Education Research*, 3 (3) 51-58. Retrieved from <http://journals.cluteonline.com/index.php/CIER/index>
- Bandura, A. (1995). *Self-efficacy in Changing Societies*. United Kingdom, Cambridge University Press.
- Bandura, A. (1997). *Self-efficacy, the exercise of control*. Nueva York, Worth Publishers.
- Betz, N. (2007). Career self-efficacy: exemplary recent research and emerging directions. *Journal of Career Assessment*, 15 (4), 403-422. doi: 10.1177/1069072707305759
- Brown, S. D., Lent, R. W., Ryan, N. E., & McPartland, E. B. (1996). Self-efficacy as an intervening mechanizing between research training environments and scholarly productivity: a theoretical and methodological extension. *The counseling psychologist*, 24, 535-544.
- Büyüköztürk, S., Atalayb, K., Sozgunc, Z., & Kebapç, Ş. (2011). The development of research self-efficacy scale. *Cypriot Journal of Educational Sciences*, 6 (1), 22-29. Retrieved from <http://www.world-education-center.org/index.php/cjes>

- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage
- Forester, M., Kahn, J. H., & Hesson-McInnis, M. S. (2004). Factor structures of three measures of research self-efficacy. *Journal of Career Assessment*, 12 (1), 3-16. doi: 10.1177/1069072703257719
- Grediaga, K. (2012). *Socialización de la nueva generación de investigadores en México*. México, D.F.: ANUIES, Dirección de Medios Editoriales
- Jairam, D., & Kahl, D. V. (2012). Navigating the Doctoral Experience: The Role of Social Support in Successful Degree Completion. *International journal of doctoral studies*, 7 (2012), 311-329. Retrieved from <http://www.informingscience.us/icarus/journals/ijds/>
- Lambie, G. W., Hayes, B. G., Griffith, C., Limbert, D., & Mullen, P. (2013). An exploratory investigation of the research self-efficacy, interest in research, and research knowledge of Ph.D. in education students. *Innovative Higher Education*, 39 (2), 139-153. doi: 10.1007/s10755-013-9264-1
- Lane, A.M., Devonport, T. J. & Horrell, A. (2004). Self-Efficacy and Research Methods. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 3 (2), 25-37. doi:10.3794/johlste.32.59

Lev, E. L., Kolassa, J., & Bakken L.L. (2010). Faculty mentors' and students' perceptions of students' research self-efficacy. *Nurse Education Today*, 30 (2010), 169–174.
doi:10.1016/j.nedt.2009.07.007

Madison, D.S. (2005). *Critical ethnography: Methods, ethics and performance*. Thousand Oaks, CA: Sage

Mathews I. G. (2005). Self-Efficacy-: A Review. *ABAC Journal*, 25 (2), 1-4. Retrieved from http://www.journal.au.edu/abacjournal_index.html

Maxwell, J. (2005). *Qualitative research design: An interactive approach* (2nded.). Thousand Oaks, CA: Sage

Moreno, M. G. (2010). *Historias de formación para la investigación en doctorados en educación*. Mexico: Plaza y Valdés

Reyes-Cruz, M.R., Hernández, E., & Yeladaqui, B. (2011). *¿Cómo elaborar tu proyecto de investigación?* México: Universidad de Quintana Roo

Reyes-Cruz, M.R. (2011). Maestría en educación, logros y retos a cinco años de su creación [Master in education, accomplishments and challenges after 5 years since its creation]. In M.R. Reyes-Cruz (Ed.), *20 años de lenguas extranjeras en la Universidad de Quintana Roo* (pp. 181-200). México: Universidad de Quintana Roo

Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage

Shaw, K., Holbrook, A., Scevak, J., & Bourke, S. (2008). The response of pre-service teachers to a compulsory research project. *The Australian Educational Researcher*, 35 (3), 89- 109.
Retrieved from <http://link.springer.com/journal/13384>

Shivy, V. A., Worthington E. L., Wallis, A. B., & Chris Hogan, C. (2003). Doctoral research training environments (RTEs): Implications for the teaching of psychology. *Teaching of Psychology*, 3 (4), 297-302. doi: 10.1207/S15328023TOP3004_03

Universidad de Quintana Roo (1995). *Licenciatura en Lengua Inglesa* [PDF document]. Retrieved from <http://www.uqroo.mx/planes-de-estudio/licenciaturas/chetumal/-lengua-inglesa/#5>

Universidad de Quintana Roo (2012). *Maestría en Educación* [PDF document]. Retrieved from <http://www.uqroo.mx/planes-de-estudio/maestrias/chetumal/maestria-en-educacion/#5>

Universidad de Quintana Roo (2013). *Foro de estudios en lenguas internacional* [PDF document]. Retrieved from <http://fel.uqroo.mx/index.php?id=13>

Universidad de Quintana Roo (2014). *Identidad Universitaria*. Retrieved from <http://www.uqroo.mx/nuestra-universidad/identidad-universitaria/>

Universidad de Quintana Roo (2014) *Maestría en Educación* [PowerPoint slides].

Informative meeting

Unrau, Y., & Beck, A. (2004). Increasing research self-efficacy among students in professional academic programs. *Innovative Higher Education*, 28 (3), 187-204. Retrieved from <http://link.springer.com/journal/10755>

Wolcott, H.F. (2001). *Writing up qualitative research*. Thousand Oaks, CA: Sage

APPENDIX

Interview guide

Guía de entrevista autoeficacia

1. Cuénteme sobre sus orígenes. Dónde nació, quienes son sus papás, tiene hermanos.
2. Cuénteme sobre su trayectoria académica. A qué escuela primaria fue, secundaria, preparatoria, licenciatura (privada o pública).
3. ¿La escuela le gustaba, le costaba trabajo?
4. ¿Cómo era la relación con sus maestros?
5. ¿Cómo era la relación con sus compañeros?
6. ¿Qué lugar ocupa la escuela/ estudiar en su familia? (es importante o no, por qué, los papás son profesionistas, los hermanos...).
7. ¿Trabaja, dónde?
8. ¿Qué licenciatura estudió, por qué decidió estudiar esa y no otra?
9. ¿Qué habilidades diría que adquirió en la licenciatura?
10. ¿Qué aspectos importantes le enseñaron (o aprendió implícitamente) que todo licenciado en _____ debe tener para considerarse como tal?
11. Cómo se reforzaba o aprendía eso que debía dominar para ser para volverse un licenciado en_____.
12. ¿Cómo juzgaría su desempeño? ¿Qué persona (s) influían en su idea de qué tan bueno era para hacer las cosas?
13. ¿Qué lugar ocupaba la investigación en su licenciatura? Había materias sobre investigación. ¿Hizo investigaciones como parte de sus trabajos de las materias, presentó ponencias, participó en algún seminario, colaboró con algún investigador en algún proyecto?
14. ¿Qué opciones de titulación había? ¿Cuál eligió?

15. Cualquiera que haya sido la elección preguntar por qué lo hizo. Si eligió tesis profundizar en el por qué, cómo fue la experiencia, qué tan hábil se considera en investigar al haber terminado la tesis. Cómo fue el proceso, fácil, difícil, qué aprendió, qué y/ o quiénes le ayudaron. Qué papel jugaron sus compañeros y su director de tesis.
16. Publicó algún artículo, memoria, capítulo resultado de su tesis. Si sí indagar los detalles si no preguntar por qué no.
17. Por qué decidió ingresar a la maestría en educación.
18. ¿Qué habilidades nuevas diría que adquirió en la maestría, cuáles reforzó, cuáles no pudo desarrollar?
19. ¿Qué aspectos importantes le enseñaron (o aprendió implícitamente) que todo maestro en educación debe tener para considerarse como tal?
20. Cómo se reforzaba o aprendía eso que debía dominar para ser para volverse maestro en educación
21. ¿Cómo juzgaría su desempeño general en la Maestría? ¿Qué persona (s) influían en su idea de qué tan bueno era para hacer las cosas (compañeros, profesores, calificaciones de las tareas?
22. ¿Tenía alguna idea de cómo sería la maestría antes de ingresar?
23. ¿Qué lugar ocupaba la investigación en la Maestría? Había materias sobre investigación
24. Hizo investigaciones como parte de sus trabajos de las materias, presentó ponencias, participó en algún seminario, colaboró con algún investigador en algún proyecto?
25. ¿Qué opciones de titulación había? ¿Cuál eligió?
26. Cualquiera que haya sido la elección preguntar por qué lo hizo. Si eligió tesis profundizar en el por qué, cómo fue la experiencia. Qué habilidades previas en investigación tenía.
27. ¿Qué lugar ocupaba la redacción de la tesis dentro de las diversas actividades que realizaba en la maestría y fuera de ella?
28. ¿Qué estrategias seguías a la hora de investigar, de llevar a cabo las tareas de investigación? ¿Qué tipo de estudiante te considerabas?
29. Cómo fue el proceso, fácil, difícil, qué aprendió, qué y/ o quiénes le ayudaron.
30. En algún momento decidió salirse de la maestría, que lo motivaba a seguir.
31. Cómo catalogaría la experiencia de hacer tesis. ¿Tuvo crisis emocionales, sufrió de estrés?

32. ¿Qué aspectos de realizar la tesis le resultaron agradables?
33. ¿Qué aspectos o actividades específicos de hacer tesis le resultaron estresantes, difíciles?
34. ¿Qué recuerdos le traen sus presentaciones de avances de tesis? Mostrarle el video.
35. ¿Después de buenos resultados (avances), te motivabas más?
36. Qué papel jugaron sus compañeros, su director de tesis, su familia (novio, esposo, hijos).
37. Aprendiste de alguien más a como investigar, esta persona (s) te daba (n) patrones a seguir. Al asistir a congresos, te fijabas en los investigadores experimentados.
38. Publicó algún artículo, memoria, capítulo resultado de su tesis. Si sí indagar los detalles si no preguntar por qué no.
39. Si es el caso, qué habilidades desarrolló como resultado de hacer tesis de maestría? Si no desarrolló nada explique.
40. ¿Le gusta investigar, lo considera importante, para qué sirve en su desempeño profesional?
41. Se considera profesora, investigadora, ambas cosas?
42. ¿Los papeles de profesor e investigador las considera complementarias, conflictuantes, difíciles de hacer al mismo tiempo?
43. ¿Qué tan bueno / eficaz se considera? ¿Qué lo hace pensar así?
44. ¿Ha seguido investigando después de egresar de la maestría, si no, por qué, le gustaría hacerlo?
45. ¿Ha pensado en publicar su tesis o presentarla en eventos si es que no lo ha hecho?
46. ¿Ha pensado en estudiar un doctorado?
47. ¿Si hoy le pidieran hacer un proyecto de investigación qué tan preparado se sentiría para hacerlo?

Consent form

Hoja de autorización

Estimado participante, el presente formato es para aceptar formar parte del proyecto de tesis *the Development of Research Self-Efficacy in the Students from the Master in Education*. Debido al diseño cualitativo del proyecto, su participación se dará a través de entrevistas de aproximadamente una hora. Probablemente se realice una o máximo dos entrevistas más, siempre tomando en cuenta su disposición para éstas.

Es importante mencionar que se garantizará su anonimidad; se le asignará un seudónimo al momento de presentar los resultados y nadie más tendrá acceso a la información que provea. Además, una vez organizada la información y como forma de validar los datos, se le mostrará la información para que verifique que lo que este ahí sea lo que haya respondido y para eliminar cualquier cosa que no considere apropiada.

Se le agradece mucho su colaboración.

Firma del participante

Fecha