Benemérita Universidad Autónoma de Puebla

Facultad de Lenguas

Students' challenges to engage with a thesis development based on a critical thinking analysis: LEI-BUAP

A thesis submitted to the Languages Faculty for the degree of

Maestría en la Enseñanza del Inglés

By:

Andrés García Brito

Thesis Director:

Dr. Benjamín Gutiérrez Gutiérrez

Puebla, Pue   February, 2022

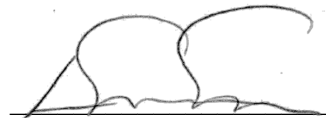# STUDENTS' CHALLENGES TO ENGAGE WITH A THESIS DEVELOPMENT BASED ON A CRITICAL THINKING ANALYSIS: LEI-BUAP

This thesis has been read by the members of the Thesis committee of

ANDRÉS GARCÍA BRITO

And is considered worthy of approval in partial fulfillment of the requirements for the degree of

MAESTRÍA EN LA ENSENANZA DEL INGLÉS

THESIS DIRECTOR
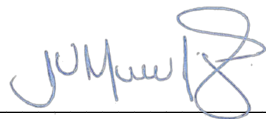
_____
Dr. Benjamín Gutiérrez Gutiérrez

COMMITTEE MEMBER

_____
Dr. Josué Cinto Morales

COMMITTEE MEMBER

_____
Dra. María Amelia Xique Suárez

COMMITTEE MEMBER

_____
Dra. Verónica Sánchez Hernández

Benemérita Universidad Autónoma de Puebla

Puebla, Pue.   February, 2022

ACKNOWLEDGEMENTS

DEDICATIONS

"A good dissertation is a done dissertation"
-Ancient Grad Student Proverb

To my mother for her immense patience, support, and love.

To the memory of my father, my inspiration and role model.

To my siblings for their motivation and advice.

To my friends for their continuous motivation and unconditional friendship.

ABSTRACT

A thesis is a long-written work where students demonstrate their capacity to identify a topic of their interest, explore it in-depth, and produce original research on their own with the guidance of a supervisor (Reynolds & Thompson, 2011) (Sadeghi & Shirzad Khajepasha, 2015) (Ibarra-López, 2017). It is perhaps the first and last opportunity to experiment and learn to carry out these kinds of academic papers and its development may be meaningful for their professional development (Reynolds & Thompson, 2011) (López del Mar, 2016); however, it is no longer the preferred method to graduate. Even though there are studies on the field, most of them are focused on the development of graduate theses and in other study areas different from English teaching. So, this thesis will explain why Students face challenges to engage with a thesis development based on Critical thinking (Ennis, 1985) (Elder & Paul, 2003) (León Monteblanco, 2006) analysis at the Licenciatura en la Enseñaza del Inglés (LEI) at BUAP. This thesis is a qualitative study where the data will be collected by interviewing ten students of LEI to get their beliefs to analyze the factors that influence their decision to elaborate a thesis as a graduation modality. Results will be analyzed using critical thinking to distinguish factors that contribute to the students' performance in conducting academic research as well as to understand how students' engagement can be boosted to develop a thesis at LEI and make some suggestions to help them present it as a graduation modality.

Index

Index of tables and figures

Chapter I – Introduction

1.1 Introduction.

Research is defined as a detailed study of a subject, especially in order to discover information or reach a new understanding (Cambridge University Press [CUP], 2020a). It is part of our lives since early stages since we try and learn something by performing an experiment, and this is best accomplished by turning the issue into a question, with the intent of the research to answer that question (Kowalczyk & Scalia, 2013); but, it is until high educational level when research performance gets an academic importance through the development of a long written work on a particular subject: the thesis (CUP, 2020b). However, the tradition of presenting a thesis as a form of graduation in the bachelor's degree is seldom considered as the first option due to the wide spectrum of other forms of graduation by the students (Daen, 2019). As a reference, in the highest house of study of the country: the *Universidad Nacional Autónoma de México* (UNAM), the percentage of graduated students by the modality of thesis in 2019 was only 25.6%, contrasted with 36.2% in 2009 and 66.1% in 2005 (UNAM, 2020). This issue could be moved to our context, the *Benemérita Universidad Autónoma de Puebla* (BUAP), particularly the BA of English Language Teaching (LEI) program, where with the different modalities of graduation, students opt to graduate with a different modality rather than a thesis (BUAP, 2020a). Notwithstanding, a considerable number of students still perform this academic research during the last semesters of the degree, but with the constant dilemma of whether or not to get engaged with thesis development. Even when diverse investigation about the factors that influence the thesis development process has been discussed as in Reynolds & Thompson (2011), Dowd et al (2018), and Dwihandini et al (2013) papers, there is still a lack of deeper investigation in the undergraduate level and research is mainly oriented in a foreign context and other areas of study.

As the development of an undergraduate thesis is known to help students develop critical-thinking skills and research methods (Lopatto, 2003; Seymour et al, 2004) and generate transferable knowledge and skills useful during the in-service practice (Lundgren & Robertsson, 2012), this investigation in the area of professional development and research is necessary to understand the challenges that LEI students' face to engage with a thesis development based on a critical thinking analysis so some suggestions can be made to boost students' engagement with thesis develop LEI-BUAP.

1.2 Purpose of the study

Granted that presenting a thesis to obtain a bachelor's degree is not easy and, with the rise of other forms of graduation, it is no longer the preferred method for students to graduate, the purpose of this study is to explain why students' face difficulties to engage with BA thesis development by applying a critical thinking that accurately analyze the issue, separating the information to determine the factors in order of importance and be able to answer the who, what, when, and why of the challenges that may affect the thesis development and thus develop strategies to motivate students to engage with research development. As it was mentioned, the thesis development level is crucial for the professional development of the pre-service training due to it gives assurance that professional work can be done as well as it could be the last opportunity to experiment and learn to carry out these kinds of academic papers (López Del Mar, 2016) so one degree belonging to the Humanities area of the BUAP has been selected to conduct the study; the B.A. in English Language Teaching (LEI), a program offered at the Languages faculty (*Facultad de Lenguas*). This context was chosen for its close relation to the current graduate program of this thesis. Participants from this program are senior students who are near to graduating, and they are taking the subject of Research Seminar II.

This M.A. thesis aims to explain why students' face challenges to engage with a thesis development, analyzing the factors that contribute to the students' performance in conducting a thesis development, as well as the factors that constrain students' decision to elaborate a thesis as a graduation modality and the possible strategies to motivate them.

1.3 Rationale

In as much as the development of a thesis may bring new knowledge to humanity (Montiel Romero, 2019), promoting this kind of research during undergraduate level may be translated not only in the formation of better-prepared professionals capable of innovating and applying quality knowledge but also may complete in a better scale one of the of BUAP's mission: to promote research, creation, and dissemination of knowledge (BUAP, 2020d). As a matter of fact, the process of thesis development has been studied from different perspectives, however, most of the study has been conducted in South America and/or oriented to the study of Master and Ph.D.'s thesis, so this study will contribute with a deeper investigation about the factors that influence the thesis development process. Moreover, most of these studies are contextualized in other academic disciplines, so this study aims to contribute to the humanities area, particularly in teaching, linguistics, and research. Finally, this study will make suggestions to help students to make the decision to engage with BA thesis development after Research Seminar I & II, benefiting their professional development and the knowledge production of the university.

1.4 General objective

This thesis has as the general objective of finding out why students' face challenges to engage with a thesis development based on a critical thinking analysis at LEI-BUAP to make some suggestions that help students to engage with BA thesis development

1.4.1 Specific objectives

This research addresses the following specific objectives:

1.- Analyze the critical thinking factors that influence students' decision to elaborate a thesis as a graduation modality in the LEI program at Facultad de Lenguas, BUAP

2.- Distinguish factors that contribute to the students' performance in conducting academic research

3.- Understand how students' engagement can be boosted to develop a thesis at LEI-BUAP

1.5 Research questions

Coupled with the specific objectives described in the previous point, this thesis has three research questions:

RQ1. How do critical thinking factors influence students' decision to elaborate a thesis as a graduation modality in the LEI program at Facultad de Lenguas, BUAP?

RQ2. What critical thinking factors contribute to the students' performance in conducting academic research?

RQ3. How can students' engagement be boosted to develop a thesis at LEI-BUAP?

1.6 Methodology

Buckley et al (1976) define research methodology as "the strategy or architectural design by which the researcher maps out an approach to problem-finding or problem-solving". With this in mind, this point will present and briefly define the architectural design and strategies to carry out the present study.

Approach: Qualitative

According to Creswell (2013), a qualitative study is defined as "an inquiry process of understanding based on a distinct methodological approach to inquiry that explores a social or human problem. The researcher builds a complex, holistic picture; analyzes words; reports detailed views of participants and conducts the study in a natural setting" (p. 300). As this study aims to explore a problem, learn more from participants through exploration, and develop a detailed understanding of a central phenomenon, this approach is the indicated to understand and explain the challenge students face to develop a thesis. Moreover, as data will be collected based on words from a small number of individuals, qualitative research methods will be used to understand how participants experience the phenomenon (Bhandari, 2020; Creswell, 2011).

Method: Case Study

As it is expected to catch the complexity of a thesis development process, a case study was chosen for this purpose. According to Stake (1995), case study is "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (p. xi). To this definition, we could add that this research involves the study of a case within a real-life, contemporary context or setting (Creswell, 2013). At the same time, Creswell (2013) considers this type of study should not include more than five participants, that number should provide sufficient opportunity to identify themes of the cases as well as to conduct cross-case theme analysis.

Design: Cross-sectional

Data will be obtained from a particular group of students who are writing their thesis in the semester of Spring 2021. For this reason, a cross-sectional study was chosen for this study as this design involves

looking at data from a population who share a particular variable of interest at one specific point in time (Creswell, 2014b).

Purpose: Explore

According to Oxford Reference (2018), exploratory research is "the preliminary research to clarify the exact nature of the problem to be solved". Exploring is examine or discuss a subject or idea thoroughly (Macmillan, 2020). In this study, the students' challenges to engage with a thesis development will be examined and discussed in order to have a better understanding of this existing issue

Technique: Interview

As this study is qualitative research, the instrument for data collection chosen par excellence was the interview, due to their particular usefulness to understand the meaning of what the interviewees say by pursuing in-depth information around a topic (Creswell, 2014b).

Instrument: Semi-structured Interview

The instrument chosen for this study is a semi-structured interview as it is the most often used type in educational evaluation (Griffee, 2005). This kind of interview has the purpose of obtaining descriptions of the life world of the interviewee in order to interpret the meaning of the described phenomena" (Brinkmann & Kvale, 2015, as cited in Denzin & Lincoln, 2018). Moreover, this instrument is much more flexible than a structured interview due to interviewer is free to ask for clarification (Denzin & Lincoln, 2018; Griffee, 2005).

1.7 Significance of the Study

Explaining why Students face challenges to engage with a thesis development can be the opportunity to understand the reasons and necessities students have to complete their thesis and

present it to obtain their degree. At the same time, this study will provide a critical thinking analysis on this issue, contributing to the previous research done and setting the basis for further studies in the same area. At last but not least, this study will make suggestions to help students to make the decision to engage with BA thesis development and choose it, after Research Seminar I & II, as a graduation modality.

1.8 Limitations

This study focuses on thesis development at LEI-BUAP. This means, that only concerned with the undergraduate level of study and in one of the 84 face-to-face undergraduate programs offered by the University, so might be useful to replicate this study in another mayor, graduate program, and even in a different university with a different context. Also, this study is a qualitative case study so this study will have a reduced universe. This study could be complemented and/or contrasted with a study of numerical data for statistical analysis (Bhandari, 2020), in other words with a quantitative approach.

1.9 Key Terms

Thesis development: a process in which students have to communicate within an academic discourse community by observing, comparing, analyzing, discussing, evaluating, writing, and presenting, thus they have to learn to write academic texts which meet the discoursal expectations of their tutors or professors, who will interpret and finally evaluate their texts (Criollo, 2005).

Research: a detailed study of a subject, especially in order to discover information or reach a new understanding (CUP, 2020a).

Academic Writing: the writing that includes all the writing practices that occur in the academic context and are intended to be read outside of it (recommendations, informative texts), or in

professional academic and scientific contexts (thesis, research articles) (Camps Mundó & Castelló Badía, 2013).

Thesis / Dissertation: although the definition of these terms is used slightly differently depending on the country (Enago Academy, 2019; Sadeghi & Shirzad Khajepasha, 2015), in general both terms refer to a long piece of writing on a particular subject that you do at the final part of a university degree (Macmillan, 2021a, 2021c).

All-But-Thesis: students who, having completed all the subjects or requirements of a career, are late or do not finish the thesis (Rodríguez, 2013, as cited in Abreu, 2015).

Critical thinking: a reflective and reasonable thinking that is focused on deciding what to believe or do. This process of reflection seeks the natural truth of things, and it is composed of two dimensions: abilities and dispositions. (Ennis, 1985, 2013)

Motivation: the feeling of enthusiasm or interest that makes student determined to intrinsically or extrinsically succeed in a task, in this case, the thesis (Macmillan, 2021b; Puspita, 2019).

Frustration: a negative feeling of being annoyed or less confident because of the disappointment of cannot achieve a goal or after a wish collided with an unyielding reality (CUP, 2021; Jeronimus & Laceulle, 2017).

1.10 Organization

This chapter introduced the aims of the investigation in Exploring undergraduate ELT Students' challenges to engage with BA thesis development. The following chapter presents a critical review of the theoretical framework that is relevant to this study. This theoretical framework will serve as a foundation for chapter III which thoroughly details the methodology employed to analyze all the elements involved such as the context, participants, instruments involved in this study.

Subsequently, the results of the study are presented and discussed in chapter IV. Relevant results are highlighted in order to provide the reader with key aspects that could help students to engage with research performance. Finally, Chapter IV shows the conclusions, contributions, and limitations of the present investigation as well as directions for further research.

Chapter II – Literature review

This chapter provides an overview of the theory that sustain this investigation as well as previous research done in the area. Chapter is organized into two main sections. The first one refers to the thesis concept and its development in an undergraduate level where the English as a second language must be used. The second part refers to the critical thinking process and how it was used to reach the critical thinking factors that affects the students; thesis development; internal factors, external factors, institutional factors.

2.1 Introduction

Research is defined as a detailed study of a subject, especially in order to discover information or reach a new understanding (CUP, 2020a). Research has been part of our lives since we were born, but it is until the university level that this process of discovering and reaching new understanding acquires a new perspective. So, at this level we can define research as the process of systematic inquiry that entails collection of data; documentation of critical information; and analysis and interpretation of that data/information, in accordance with suitable methodologies set by specific professional fields and academic disciplines (Hampshire College, 2015). As a result of this process, it is the development of a long-written work on a particular subject: the thesis (CUP, 2020b). Writing a thesis at an undergraduate level is seen as an indicator of the student's capacities as a researcher, inasmuch as it demonstrates that he/she is capable of identifying his or her own area of interest, exploring a subject in-depth, and using the appropriate research tools (The WritePass Journal, 2013). However, as the thesis could be the longest and most difficult piece of work a student has ever completed, it is common that students face challenges to complete it. For this purpose, this study considers a critical thinking analysis of the factors that influence the engagement of thesis development. First, it defines the concept of thesis and its development in

the LEI program context, then it addresses the student's challenges -internal and external- to write a thesis based on a critical thinking analysis. After that, it reviews the programs which help students' research engagement, and finally, it discusses the previous studies on this topic.

2.2 Thesis

One of the most traditional ways to graduate and obtain a degree at the university level is the thesis or also called dissertation. The word thesis comes from the Latin *thesis* which means "theme or proposition" and it is the written dissertation presented to the university by the candidate for the title of PhD in a faculty(RAE, 2021b). On the other hand, dissertation comes from the Latin word *dissertatio* and is the act of reasoning, discussing carefully and methodically on some subject, either to expose it, or to refute other people's opinions (RAE, 2021a). It is certainly unknown where this practice began, but it is believed that it arose during the Middle Ages, with the emergence of universities, where oral exposition had to be supported through academic exams to belong to the selected group of people who obtained the degree. Over the years, not only a written work was incorporated into this practice to guarantee the knowledge and exposure of the research carried out by the students, but also the distinction between undergraduate studies and graduate studies - master's, and doctor's degree- was installed (Fernández de Zamora, 2015; Ibarra-López, 2017). With this distinction, the requirements and content of the theses and dissertations increased depending on the degree and the university. Important to realize that the usage of the terms thesis and dissertation varies from country. In some Anglo-speaking countries, both thesis and dissertation terms are used; the difference is usually the degree for which the written work is presented. In European and British universities, a thesis is an original research work written by Ph.D. students to obtain their degree, while dissertation is used in undergraduate studies and master's degrees; however, in American universities, the terms are used in reverse. Here a thesis

is used to refer to an undergraduate or master's degree study that involves preliminary research and it is shorter than a PhD. work or dissertation. In contrast, in the Australian and New Zealander context, the term thesis is used for all university degrees (Enago Academy, 2019; Sadeghi & Shirzad Khajepasha, 2015). In the case of Mexico, both words can be used to refer to a job that is presented to obtain a university degree. Even though the Dictionary of the Spanish language of the *Real Academia Española*, defines thesis as the written work presented to get the title of PhD, in the particular case of Mexico the term thesis is also used to refer to the work that is submitted to obtain the bachelor's degree or the master's degree too (Academia Mexicana de la Lengua, 2010). The following table briefly organizes the terms described in Academia Mexicana de la Lengua (2010), Sadeghi & Shirzad Khajepasha (2015) and Ibarra-López (2017), as well as the web pages of the Australian National University (2016), Enago Academy (2019), and Postgrad (2020).

Table 2.1

Thesis and dissertation usage of terms

Context	Term used in undergraduate studies	Term used in graduate studies	
		Master's degree	Doctor's degree
The United States of America	Thesis	Thesis	Dissertation
Europe and England	Dissertation	Dissertation	Thesis
Australia	Thesis	Thesis	Thesis
New Zealand	Thesis	Thesis	Thesis
Mexico	Thesis	Thesis	Thesis

Even though this research work is usually submitted to get an academic degree in both undergraduate and graduate studies, the essence of the thesis could be defined as a long-written work done on a particular subject where university students demonstrate their capacity to identify

a topic of their interest, explore it in-depth, and produce original research on their own with the guidance of a supervisor (Dominguez, 2012; Fernández De Zamora, 2015; Macmillan, 2021c; Sadeghi & Shirzad Khajepasha, 2015; SkillsYouNeed, 2015).

As this study is developed in a Mexican context, the term 'thesis' will be used for referring to this academic written work done during the university. In this country, the first university in implanting the tradition of submitting a thesis was the *Real y Pontificia Universidad de México* – today known as UNAM - so it is not surprising that future universities in the country would replicate the statutes for obtaining the academic degree and the solemn protocol that involved submitting a thesis. At that time, there were announcements or invitations to public university events where the content of the subject that the student was going to defend, the name of the teacher who would preside over it, and the place and time it would take place were reported. Moreover, the protocol or ritual for the exam where the student presented his thesis consisted of a conclave where the seniority of the teachers was the base to carry out the evaluation as well as the ordinances of the ceremony. At the end of the exam, the examinee was asked to leave the room for the evaluation and pay the 'tips' for their exam – an expensive cost at that time and, therefore, many students looked for a sponsor to help them with that expense. Once the doctors and masters voted to approve or fail the examinee, he was immediately informed of their verdict. If this was approved, the graduate was asked to take an oath of obedience to the King and belief in the Immaculate Conception of Mary (Fernández De Zamora, 2015). Nowadays, the statutes, requirements, and content of the thesis have changed; however, some of the traditions inherited from that era are still preserved such as:

- the requirement of a printed thesis

- the presentation of a public oral exam to defend the thesis

• the order by seniority that professors must occupy in the jury

• the tips to the jury or synod, usually in form of a gift rather than money

• the oath or swearing-in

Notwithstanding the protocol and requirements are similar in all areas, it is not the same to develop a thesis in the humanistic area of study as an engineering or medical science, and even more for different academic degrees. Moreover, there is another factor to consider in this study, the requirement to write a thesis in a target language, therefore the process of thesis development at the undergraduate level, and the use of a foreign language to write it must be explained.

2.2.1 The thesis development in a bachelor's degree

One of the biggest challenges in the academic life of the students is to prepare a thesis where they present their ideas and findings in the professional field of their specialty. Sometimes, this thesis is "the first authentic writing experience that students have and is, therefore, one of the best opportunities to learn scientific writing" (Reynolds & Thompson, 2011, p. 209). As has been noted, a thesis is part of the graduation requirements of all academic disciplines and all degree levels, there are significant differences among them, particularly in the requirements and length. First of all, an undergraduate thesis is considerably shorter in length than a postgraduate one, averaging only 10,000 – 15,000 words or 50 – 75 pages in American universities(The ArtScience Interfaculty, 2016; University of Buffalo, 2006). Important to mention that this length is considered for humanities as in this field, Bachelor in Arts (BA) thesis trend to be more qualitative instead of quantitative; which implies the collection and analysis of data to understand concepts, opinions, and rather than analyzing numerical data for statistical analysis (Bhandari, 2020). In Mexico, the thesis development does not have a standard in this regard. Each university and major

defines its own thesis protocol and length. In general, a BA thesis oscillates around 60 – 100 pages long (Fernández De Zamora, 2015; Universiamx, 2016; UQRoo, 2015). However, there is another factor that must be considered in the context of this study. As the B.A. in English Language Teaching (LEI) offered by the Benemérita Universidad Autónoma de Puebla requires the development of a thesis in the target language, the use of a foreign language adds an additional degree of difficulty to this process which is already complex itself.

2.2.2 Writing a thesis in English as a Foreign Language

The BA thesis in English studies is a coherent and informed English language discussion of a professional issue pertaining to the English language field. In addition to the description given previously, a thesis written in EFL must also demonstrate the author's familiarity with academic English and the literature of the given topic area (Eötvös Loránd University, 2010). In English Language Teaching (ELT) degrees, academic writing is elemental during the major; however, producing academic work, like a thesis, challenges students in different ways (Hassan Al Badi, 2015). This idea is supported by Erbay Çetinkaya and Yılmaz (2017) who claim that:

> "writing is one of the most challenging language skills in that it requires several skills including the use of correct grammar, the choice of an appropriate lexicon, the ability to plan the process, the use of appropriate linking, etc." (p.46)

So, when writing a thesis in English, students must have a high English language proficiency so they can both understand the concepts and theory used by the authors they are reading and express their ideas and viewpoints of the topic clearly. Notwithstanding the challenges this process may represent for students, writing a thesis becomes an opportunity for undergraduate students to acquire a professional development by improving their attitude, English skills, and of course

research knowledge, thus facilitating them to communicate within the ELT community (Criollo, 2005; Tapia Carlín, 2013).

In the context of this study, the *Licenciatura en la Enseñanza del Inglés* (LEI), the production of a thesis written in English is one of the requirements for presenting it as a graduation modality. The process from start writing it until submitting it is quite similar to another undergraduate thesis, just with the oral presentation and examination in the target language. The process and requirements are described following.

2.2.2.1 Requirements for the thesis at the LEI

Focusing on the LEI, a thesis is a final assignment that students can submit to get a degree in English Language Teaching. As this academic paper must be written in English, it validates the student's English language proficiency, so the requirement of demonstrating an English language level of B2, according to the Common European Framework for references of the languages, is fulfilled by submitting the thesis. Important to realize that at this level, the thesis can be submitted in pairs or individuals, and students choose the professors they want to be their thesis supervisors and readers, so they are aware of the professor's capacities that may help them to complete the thesis.

Most of the writing process is usually done during the last semesters of the major, in particular in the thesis seminar classes. Once the student finishes the thesis and if the supervisor and the readers approve it, the now candidate must defend his/her investigation through an oral presentation known as *Examen Profesional* (Thesis defense). This protocol is similar to the UNAM's, here the jury is constituted of the thesis director and two committee members ordered by seniority and that the student has previously chosen. During the presentation, the candidate presents his theme in front of the jury using his corresponding support materials. Once the exhibition is over, the jury

will question the candidate about his research. After the interrogation, the jury will ask the candidate for a moment to deliberate a verdict to approve or not the candidate. In the event that the verdict is approved, the corresponding swearing-in of the candidate is taken (BUAP, 2015, 2020b).

2.3 Students' challenges to writing a thesis based on critical thinking

As it was reviewed, a thesis is a complex process where students demonstrate their capacity to conduct independent research, so it is not surprising that students face challenges while writing or even getting prepared for writing a thesis, thus leading them to opt for other graduation modalities or even start the thesis and abandon it. Since it is a problem that may affect the graduation rate of the university, programs that facilitate the development and submission of the thesis have been applied; however, it is necessary to analyze the problem and its causes to properly develop efficient programs that attack the causes and in consequence mitigate the problem. For this reason, critical thinking is necessary to analyze the issue by separating the information to determine the factors that affect the students' thesis development, adopt a position about it, and act.

Critical thinking is a type of complex thinking that also involves other skills such as understanding, deduction, categorization, or judgment, among others; and its implementation involves stages quite similar to the scientific method (López Aymes, 2012). This thinking is concerned with the management and processing of the information that is received, encouraging us to build our knowledge and a deep and meaningful understanding of the content of learning. To do this, skills for inquiry and logical reasoning must be applied by weighting the data and evidence that support reasoning in order to develop arguments for or against assumptions and hypotheses (León Monteblanco, 2006).

2.3.1 Critical thinking background

Critical thinking is the most studied cognitive process. Consequently, it has a multitude of definitions that attempt to explain this process, especially in the university educational field. Some of the most outstanding definitions about it are from John McPeck, Linda Elder and Paul Richard, and Robert Ennis. On one hand, in 1981, McPeck defined Critical thinking as "the skill and propensity to engage in an activity with reflective skepticism" (p. 7). On the other hand, Elder and Paul (2003) defined critical thinking as the way of thinking in which the thinker improves the quality of his thought by seizing the inherent structures of the act of thinking and subjecting them to intellectual standards. However, according to Hawes (2003), Robert Ennis is the most influential theorist among all those who have proposed to define critical thinking, which is why his definition has been imposed and is accepted by the majority of scholars on the subject. For Ennis (1985; 2013), critical thinking is reflective and reasonable thinking that is focused on deciding what to believe or do. At the same time, he considers this thinking as a complex cognitive process that involves dispositions and capacities with three basic dimensions:

- Logic (judging, relating words to sentences),

- Criterial (using opinions to judge sentences),

- Pragmatics (understanding judgment and decision to build and transform the environment).

Moreover, according to Norris and Ennis (1989, as cited in Olivares Olivares, 2012), this process of discriminating what is the "truth" that each individual deems convenient to believe is an important stage in the decision to solve problem cases and reach the proper conclusion. For this, it is necessary to develop the skills for inquiry and logical reasoning, analyze the data and evidence that support reasoning, and develop arguments for or against assumptions and alternative hypotheses. This process of reaching conclusions based on evidence is explained by Eggen and

Kauchak (as cited in León Monteblanco, 2006) who consider this process to occur in various ways. The following diagram resumes this process.

Figure 2.1

Eggen y Kauchak's diagram of critical thinking process

CONCLUSIONS GENERATION PROCESS				
Confirming conclusions with facts.	Identifying bias, stereotypes, clichés and propaganda	Identifying unstated assumptions	Recognizing overgeneralizations and under-generalizations	Identifying relevant and irrelevant information
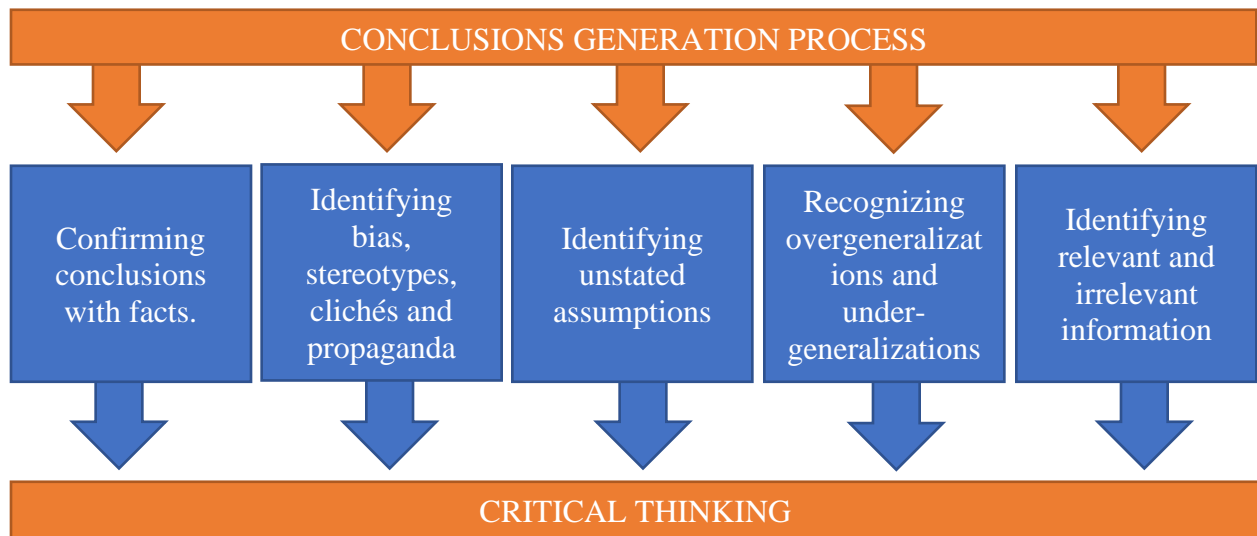
CRITICAL THINKING

Critical thinking is a process in which intelligence is used to effectively arrive at the most reasonable and justified position on a problem or situation by analyzing results and situations of the subject where the reason always predominates over other dimensions of thought. With this in mind, this process requires critical thinkers to use their capacities to solve problems, make decisions or learn something new; analyzing the context, the facts, and what is known about what happens. For this reason, Damian Casas et al (2004) provides 4 stages to develop critical thinking:

1. Interpretation of information. In this stage, the information is interpreted from the meaning that we give to each experience and situation; For this, the information is selected, the facts are organized, the relevant is distinguished from the irrelevant, and then organized.

2. Analysis and synthesis of information. Here, the whole is split into its essential parts, in order to try to discover new relationships and connections or to regroup them in a

meaningful context. In turn, it involves comparing the information collected, contrasting it, classifying assumptions, questioning beliefs, developing hypotheses, and formulating conclusions.

3. Statement of reasons. Then, the idea is argued by agreeing or disagreeing it, according to logic and reason. Evidence and reasoning are used when demonstrating procedures and instruments that corroborate the above.

4. Evaluation of solutions. Finally, this stage involves evaluating propositions, arguments, or forms of behavior. It is also associated with a meta-cognitive reflection: judge, appreciate, value, debate, criticize, support, etc.

At the same time, León Monteblanco (2006) mentions that when critical thinking is considered a process, reference is being made to the five capacities that lead to formulating critical thinking described in the Eggen and Kauchak diagram, such as observation, which allows descriptions and characterizations; comparison and contrast, to establish diverse relationships; as well as classify; make inferences either by induction or deduction, etc.

With this in mind, this process will be used to determine the critical factors that affect the development of the thesis, for which a deductive argumentation has been taken to guarantee the conclusion. This approach proposed by Bierman and Assali (1996) in their book "The critical thinking handbook" proposes a structure for it. According to the authors, the arguments have a nature that does not depend on the content but the intentions. Thus, if the premises seek to guarantee the conclusion, the arguments are considered deductive, while if the premises only seek to provide support, the arguments are considered inductive. Since this research uses a deductive approach, it is assumed that, if the premises are true, the conclusion must be true, so enough information must be provided in the premises to achieve it. These premises are the critical factors

that influence the development of the thesis and that are considered most common: internal, external, and institutional factors.

2.3.2 Internal factors

Writing a thesis is a laborious task and most learners engage in thesis writing without knowing the basic factors or what difficulties they face (Puspita, 2019). Several factors influence this process; regarding the personal factors, Gudiño Cuevas (2015) and Sánchez de la Torre (2010) studied the stress and anxiety that the thesis writing could generate to undergraduate students. Similarly, Puspita (2019) and Suyadi et al (2020) consider that the psychological, sociocultural, linguistics, and cognitive factors are the main ones faced by students during this process. Finally, Lestari (2020) considers that the student's language proficiency, self-organization, research background, and attitude also influence the thesis writing process.

Understanding the relationship between personal factors and the thesis writing process is essential to understand the thesis writing engagement, its development, and production. So, all these issues are grouped into 4 aspects to be analyzed, interpreted, and related to the main problem of this thesis.

2.3.2.1 Research background

Despite students conducting little research assignments during the major, especially in the area of humanities, the development of a thesis is a bigger challenge for them due to its extension, methodology, supervision, and literary research. Despite students have been prepared to write a thesis at the end of their major through taking subjects like *Redacción Academica I & II* (Academic writing I & II), *Metodología de la Investigación* (Research methodology), and *Seminario de Investigación I & II* (Research seminar I & II), students face challenges when writing this academic genre. Several studies have been conducted to know the challenges students face, and most of them

agree with the poor or even lack of research knowledge background of the students (Lestari, 2020; Thabran & Fajaryani, 2017; Tiwari, 2019). These challenges of writing a thesis might be due to many reasons, such as choosing an appropriate topic, point of the objective of the research, selecting appropriate research methodology, developing the findings of the research, and/or the whole writing style (Lestari, 2020).

a) Choosing the topic

The first issue students face when they need to write a thesis is the election of a topic. Normally, the process of Thesis writing begins from choosing an area of interest, and then a sub and sub-area in our subject (Tiwari, 2019). According to Criollo (2005) and Tiwari (2019), this is one of the most difficult parts when developing a thesis due to the lack of knowledge of the area of study. This may cause students to not have a clear idea of what they can or cannot write a thesis and, in consequence, they tend to think of unrealistic or impossible topics that they will eventually drop (Criollo, 2005).

b) Choosing the methodology

Once students identify a specific researchable problem, they need to select a research method and approach. In this process, students are required to read more about the appropriate methodology, such as making the appropriate instrument and meeting the subject of the research; however, some students feel difficult selecting the methodology because they are confused to decide what research design that most appropriate to the research they are carrying out (Lestari, 2020; Tiwari, 2019). According to Lestari (2020), "It can be assumed that they cannot differentiate the types of research design in many types of research. And they also find difficulties to determine what instrument they

should use in their research" (p.24). As a result, students also find complications to determine what instrument they should use in their research (Lestari, 2020; Tiwari, 2019).

c) Literature review

Chapter II usually concerns the Literature review. In this chapter, students have to demonstrate their knowledge of the topic and discuss its main issues (Criollo, 2005). As a matter of fact, this chapter demands a great investment of time reading and selecting information from different books, journals, biographies, and other theses. If the student is aware and concerned to conduct an extensive reading for this process, chapter II will be less hard to complete. Nevertheless, if the students do not read akin papers enough to relate them to their theory, they could feel difficult to finish this chapter (Lestari, 2020). Moreover, another issue during this chapter is the students' low ability to paraphrase the sentences in the theory which may cause students to copy and paste the theory without giving their sentences (Lestari, 2020). Lestari (2020) considers that this phenomenon happens because the students did not read enough to define their interest so that when their topic is accepted, they got confused to do the literature review. This aspect is closely related to students' attitude factor.

d) Develop the findings

Once the theory was reviewed and the data was gathered, the information had to be developed and explained. According to Tiwari (2019), one of the student difficulties is the report of their findings. This conception is reinforced by Thabran and Fajaryani (2017) and Lestari (2020) who claim that students do not know how to interpret properly the pile of data. This issue is closely related to the methodology. If the students don't select the appropriate instrument they should use in their

research, especially in qualitative research, the amount of data will be extensive, and students probably do not know where to start and what to write after they got the data. (Lestari, 2020)

Furthermore, it is important to consider the variable of writing a thesis in a foreign language.

2.3.2.2 English language proficiency

As in this context, students must develop a thesis fully written in the English language, this variable also influences the thesis development process. Learning a new language requires the development of the 4 language skills and subskills; however, writing is one of the most challenging skills to develop due to students deal not only in finding the right words and using the correct grammar but also in finding and expressing ideas in a new language (Raimes, 1983 as cited in Alfaki, 2015). According to Strauss (2012), Thabran and Fajaryani (2017), and Lestari (2020), the first challenge students face when writing the thesis is their English proficiency level, as their English is still low and limited so that they cannot write a thesis well. Grammar errors in subject-verb agreement, joining sentences together, the use of articles, prepositions, the inappropriate choice of vocabulary, irregular verbs, incorrect punctuation, and spelling are the most common issues found in a thesis written by non-native speakers. In consequence, the low proficiency in the English language could lead students to both feel worried about not having confidence in their ability and misunderstand what the theory presents (Lestari, 2020; Puspita, 2019). Even though having correct grammar is helpful when writing a thesis, students must also know how to work with existing literature, integrating and synthesizing what has been done by others (Thabran & Fajaryani, 2017).

Together with grammar issues, another challenge students face is the lack of background knowledge about the conventions of academic writing (Hassan Al Badi, 2015). Notwithstanding students have been prepared to write a thesis at the end of their study through studying related subjects, many students may not get to the level that is required to conduct research and write a

thesis. (Thabran & Fajaryani, 2017). According to Lestari (2020), academic writing has to be fully and correctly referenced, and with correct spelling, grammar, and punctuation. Besides, students also need to consider sentences and paragraph structures, as well as the layout of their work. (Camps Mundó & Castelló Badía, 2013). Notwithstanding, the low English proficiency and the interference of the first language in the students may complicate them to understand the content of the theories, hence they have trouble determining the idea when writing (Puspita, 2019). For this reason, students might hesitate to paraphrase and summarize others' work so they decide to just copy and paste the theory (Hassan Al Badi, 2015).

Both the research background and the level of English proficiency of the student interact not only between them but also with different variables inside and outside the student. One of them is the attitude student take towards writing a thesis.

2.3.2.2 Student's attitude towards writing a thesis

Most students feel that the amount of energy they spend on writing a thesis equals or outweighs the energy they spend during their whole studies (Sadeghi & Shirzad Khajepasha, 2015). It is not surprising that students have different ways of viewing the thesis. Oxford dictionary defines motivation as "a settled way of thinking or feeling about someone or something, typically one that is reflected in a person's behavior", so students' attitudes may be reflected in the way they develop their thesis. There are several reasons why students take certain attitudes towards the thesis writing process, some of them even pathologic (Salinas, 1998 as cited in Abreu, 2015)

In the first place, motivation plays an important role during the process. If students have a strong desire to complete the thesis, another factor can be solved easily, but if the students feel that they had no strong desire to finish it, it would be common to find stumbling blocks in the path (Lestari, 2020). Besides, good planning and wise time management are fundamental to finishing this

29

important academic writing (Thabran & Fajaryani, 2017). Thabran and Fajaryani (2017) and Lestari (2020), found that students have trouble when they have to manage their time wisely, which may cause students to procrastinate and struggle to finish tasks at the last minute. In fact, laziness and procrastination are two strenuous issues students need to get rid of, especially because these issues may cause students to find complications when reading relevant sources to support their writing thesis, provoking them to feel that they cannot finish it at the right time (Lestari, 2020).

All things considered previously in this point have been studied and classified inside a term known as All-But-Thesis (or All-But-Dissertation, depending on the context). Rodríguez (2013, as cited in Abreu, 2015) defines this term as the group of students who, having completed all the subjects or requirements of a career, are late or do not finish the thesis. Both personal and external factors may foment this issue; usually, the lack of motivation, lack of self-confidence or overconfidence, lack of time, and perfectionism are the most common causes of All-But-Thesis. As a matter of fact, it is common to find students who postpone their writing thesis, even because they have trouble developing their ideas or they need to deal with external factors that also influence their thesis development process.

2.3.2.3 Psychological issues

As it was reviewed, the thesis could be a demanding process where students have to demonstrate their grammar and academic writing skills, not to mention that it is also a requirement for students who want or need to submit it for getting their degree. So, it is not to surprise the development of it may bring some psychological issues like stress, anxiety, and pessimism. In fact, Lestari (2020) considers that this process implies anxiety for students, especially when they feel they don't have enough English level to express clearly their ideas in the paper so that they think that if they did the mistake their lecturer would be angry with them. In the same fashion, Gudiño Cuevas (2015)

considers that when writing the thesis, students pass through a small existential crisis that causes them to stress inasmuch as thesis development implies not only high importance to students but also a forthcoming change in the present and future adult life due to they will get their degree and they may start formally working and assuming new social responsibilities. This stress may appear in the students as a lack of interest, and, if this feeling is combined with an obligation to finish the thesis and a lack of motivation to do so, it could provoke a dislike to the job as they do not have the interest in starting the research and less in trying to finish it (Muñoz, 1998, as cited in Gudiño Cuevas, 2015),

At last but not least, the All-But-Thesis phenomenon also acquires a pathological model when influencing the students' psychology. Under that circumstance, this syndrome is considered a condition that, in some situations, requires professional assistance (Abreu, 2015). According to Salinas (1998, as cited Abreu, 2015), this condition is characterized by a feeling of frustration, guilt, and irresponsibility that, in severe cases, can lead to stress, depression, or aggression. Some responsible causes for this syndrome are:

- Lack of motivation

- Resignation

- Low self-esteem

- Negativism

- Anguish

- Depression

Altogether, all the personal factors described converged among them and may be related to different external factors too. Understanding their behavior is just the beginning, these issues should be seen from different perspectives in order to try to mitigate them.

2.3.3 External factors

Just like internal factors influence the development of a thesis, external factors may also have a similar influence on the process. Some of those factors interact and they could be the cause of certain internal factors. As a matter of fact, other activities have to be carried out by students while they are writing their theses such as other school assignments, social relationships, and even work responsibilities. For that reason, it is challenging for students to arrange a suitable time for the thesis development with all the other activities they need to do. Even though several studies analyze the factors that influence the thesis writing process, authors tend to give more emphasis to the personal factors than the external ones. However, Dominguez's (2012), Morfinez Cortes' (2017), and Tiwari's (2019) studies identified student-thesis supervisor relation, job pressures, financial problems, family obligations, and even health problems as the common external variables that influence the student, hence the outcome of personal factors that affect the thesis.

To explain these challenges faced by the students, issues were organized into four aspects: the impact that family has during this process, the socio-economic factor they have, their academic relationship with the thesis supervisor, and finally the unexpected situations that may treat the development of the thesis.

2.3.3.1 Family influence

One of the most influential external factors in academic development is the family context. As a matter of fact, the healthy relationship between parents and children promotes not only a good school performance but the well-being of the student (Gudiño Cuevas, 2015). Indeed, Dominguez

(2012) identified family support may enhance the students' opportunities for completing the thesis. By the same token, Frankl (1984, as cited in Dominguez, 2006) states that "with the family as a support system, the student feels less isolated and has a commitment and belief in a successful future"; on the contrary, the lack of a strong committed network with the family, combined with isolation, may lead students to an All-But-Thesis status.

2.3.3.2 Socio-economic status

Socioeconomic status is the social standing or class of an individual or group. It is often measured as a combination of education, income, and occupation (APA, 2013). Previous studies (Dominguez, 2012; Tiwari, 2019) reveal that economic factor is one of the greatest barriers that students could face during the thesis development process. These authors find in their studies that personal finances were a contributing factor in not finishing the thesis due to students also having to buy books and scholarly material, pay for printing, photocopy, and binding. Moreover, it is important to consider that some students come from poor family backgrounds or they have to fend for themselves so they regard thesis writing as an economic burden for them (Tiwari, 2019).

Equally important, a job is another factor that may influence this process. It is common to find students that start working before finishing the major, even in the same professional field they are studying or not; however, those professional responsibilities and job duties could interfere in the thesis development process by decreasing the time spent on writing and research and generating extra stress to the students (Thabran & Fajaryani, 2017). In the context of the LEI, students have to deal with social service and professional practices in educative institutions where they have to plan classes, design material, and give classes in front of a group, so, they often don't have time to read resources for writing the thesis (Thabran & Fajaryani, 2017). Notwithstanding the extra workload a job or professional practice may bring to the student, they could use the experience

gained during the practice and the context to obtain the data for their theses. At the same time, balancing work and school responsibilities properly will bring less pressure and internal/external conflict (Dominguez, 2012).

2.3.3.3 Thesis supervisor feedback

The thesis supervisor has an important role during the development of the thesis. He/she is the one who will assist and support students throughout the thesis development process by advising them to review theories, guiding them in the data collection and its analysis, and finally determining whether a thesis is ready for examination (Imperial College London, 2014). According to Dominguez (2012), the thesis supervisor is a key element in successfully guiding the student through the dissertation experience. He/She can assist and motivate by taking a genuine interest in understanding the academic and individual skills of the student. Similarly, Morfinez Cortes (2017) considers that the thesis supervisor should provide mentoring to a student who is learning about both how to develop the project's content and how to research. Indeed, A study developed at LEI-BUAP showed that students often see their thesis supervisor as the only source of information, so they commonly ask for their suggestions to continue with the thesis when they dialog (Morfinez Cortes, 2017).

However, students do not always have an optimal relationship with their thesis supervisor. Tiwari's (2019) results showed that one of the main complaints students make is about the uncooperative behavior of supervisors by considering they do not show any sympathy to the researcher and always speak angrily when they talk about the challenges of the thesis. At the same time, Chou (2011, as cited in Hassan Al Badi, 2015) concludes that participants feel shy and unconfident to ask for clarification and thus face many challenges during the time of writing thesis, particularly

for the lack of proper guidance and incomplete knowledge of research methodology (Tiwari, 2019).

As can be seen, the student and thesis supervisor both should try to develop a positive rapport (Tiwari, 2019). Optimal guidance during this process may help significantly to students, especially at the undergraduate level where they are familiar with the thesis development. As shown above, students usually have a low research experience so thesis supervisors must "encourage their students to read widely to enrich their knowledge about research and research methodology" (Tiwari, 2019, p. 51).

2.3.3.4 Unforeseen situations

Finally, unexpected situations also could have a strong impact when students develop their theses, what is more, some of those may force the student to take an undefined break. When people refer to an unforeseen situation, it is understood that it is an unexpected and often unwanted event, such as illness, accidents, natural disasters, and of course the loss of a loved one.

Additionally, another unforeseen situation that must be taken into account is the world pandemic caused by Coronavirus Disease (COVID-19). As this is a recent situation, studies are being developed; however, the impacts on the students' academic life, particularly in the thesis development process can be observed (Rehman, 2020; Rusu, 2020). For example, the lockdown due to COVID-19 has forced students not only to change their research and their thesis in order to comply with restrictions resulting from the COVID-19 pandemic and public health emergency measures (Memorial University, 2020) but also to defend their theses online (BUAP, 2020b). Several universities decided to modify the rules to allow students to submit their thesis using online videoconferences; however, the impacts that this new kind of graduation modality could bring to students have not been studied deeply yet.

All these issues in these variables represent just one part of the challenges faced by the students, and they do not have to be seen independently. All factors considered here converge with other variables, and they must be analyzed considering the context, the facts, and what we know about why a phenomenon occurs to go beyond the obvious.

2.4 Research engagement

Research has culture, and, like any culture, it is built and experienced within a community (Morfinez Cortes, 2017). Iqbal et al (2018) pointed to Schein 's definition of this culture as

> "the values and ideas that researchers use to handle research-related problems. It is the combination of all the activities, all the thinking, all the collaboration, and cooperation carried out to promote the research in faculty members" (p,188).

However, this culture must include students too by motivating them to engage with this culture and get involved in the development of it. Writing an undergraduate thesis is perhaps the first authentic writing experience that students may have, and that experience is known to help students develop not only research methods but also critical-thinking skills (Reynolds & Thompson, 2011). For this reason, one of the universities' duties should be to establish a research culture (Iqbal et al, 2018). In Mexico, this culture is being implemented in many universities that are used to focus mainly on teaching by emphasizing research, administration, and Social Service (Hernández Méndez & Reyes Cruz, 2014).

Focusing on the LEI-BUAP, research plays an important role since encouraging it, creating, and disseminating knowledge is part of the institutional mission of the university (BUAP, 2020d); so the institution provides many resources for students to facilitate and boost research. For thesis development, LEI offers specialized forums and subjects to help students to develop a thesis. These

subjects are Research methodology (*Metodología de la Investigación*) and Research seminar I & II (*Seminario de Investigación I & II*), where the students learn the theories for researching and academic writing as well as they start writing their thesis proposal (Facultad de Lenguas 2016b, 2016c, 2016d). Moreover, many faculty members are part of the Program for Faculty Development - PROMEP, for its acronym in Spanish - and the National System of Researchers, (*Sistema Nacional de Investigadores)*, hence students also have professional and qualified professors to request for guidance and supervision. At last but not least, the information access provided by the university in the library and electronic resources is another crucial factor that may enhance students' engagement with the thesis development. All these factors are grouped into two factors: Elements that academically help students to develop the thesis, and elements that motivate or boost thesis development.

2.4.1 Institutional elements to help students to write a thesis

Institutional elements could be understood as the institutional factors that influence the thesis development process. Some authors (Carlino, 2005; Edel et al, 2006; Merino Solari, 2019) have studied these factors by considering the lack of resources, environment, academic support, and research background as the factors that can hinder the completion of the thesis; however, in the LEI-BUAP context, the institution provides several elements which aim to solve those issues for its students and academic, including subjects, forums, seminars, and a wide biographical collection.

The first support element institution provides is specialized subjects which address to help the student to start researching and guide them in the production of their theses. These subjects are usually taken at the last semesters of the major and its goals are described briefly in the following table:

Table 2.2

Research classes' goals

Subject	Learning outcomes	Thesis advances
Metodología de la Investigación	Develop a research protocol that seeks to contribute to the solution of problems related to the teaching-learning process of English in specific contexts by reviewing and identifying the different stages of qualitative, quantitative, and mixed research, thus laying the foundations to continue the study in subsequent research seminars.	•Thesis proposal
Seminario de Investigación I	At the end of the course, the student will write the first two chapters of his research work as well as an outline of chapter three around his research topic in the field of teaching-learning foreign languages.	•Chapter I •Chapter II •Proposal for Chapter III
Seminario de Investigación II	The student will conclude the research protocol started in the subjects of Research Methodology and Research Seminar I. In addition, they will develop basic capacities and skills in linguistic, pedagogical, and methodological areas with a general vision of the field of education in the fields of teaching, linguistics, culture, and translation.	•Chapter III •Chapter IV •Chapter V

Taken from Facultad de Lenguas (2016b, 2016c, 2016d).

As can be seen, the subject of research methodology is primarily focused on both providing students with the basic knowledge about how to conduct academic research and developing the outline for the thesis . Subsequently, in the subject Research Seminar, I request students to develop

the first chapters of the thesis as well as an outline for chapter III. In this subject, the professor helps the students by checking their research protocols, guiding them to raise and delimit their research topics, and reviewing the bibliography as well as the theoretical framework of the research. Finally, the subject of Research Seminar II provides students with the research methods and techniques needed to develop chapter III, the guidelines for the presentation and discussion of results in chapter IV, and the protocol to elaborate the final chapter. Important to mention that students need to hand in these chapters at the end of the subjects even though they do have to present it as a graduation modality.

In addition to these subjects, the major also offers various forums and lectures where both students and teachers can present to the entire institutional community their thesis progress, articles, and research workshops; thus helping students by giving them ideas and suggestions to continue their research. Equally important, the academic faculty who advise and accompany during this research process is also decisive for the good development of the thesis (Merino Solari, 2019). Most professors have extensive experience in conducting research, so it is important they try to raise students' awareness of the importance of thesis writing. Teachers should shoulder the responsibility of guiding students in thesis writing and enhancing their abilities (Han, 2014, as cited in Erbay Çetinkaya & Yilmaz, 2017)

Last but not least, bibliographic collection and literature availability are other important elements that could positively impact the thesis writing experience. As a matter of fact, libraries play an important role in the research process and, with the emergence of digital libraries and electronic resources, the availability of books, journals, and other theses can provide access to many of the knowledge networks around the world. In the case of the BUAP, the institution provides students with a large bibliographic collection and electronic resources like ebooks, audiobooks, institutional

repositories, agreements with digital libraries around the world, access to various indexed journals among other bibliographic resources (BUAP, 2020c). All these aspects give students a great advantage to carry out bibliographic research, allowing them to obtain more easily and quickly the theories necessary to develop their thesis. However, as it was reviewed above, students often face challenges to conducting academic research, so it is important that professors not only encourage students to use these tools but also help them to locate the required literature by encouraging their students to read widely to enrich their knowledge about research and research methodology (Tiwari, 2019)

2.4.2 Elements to motivate students to submit the thesis

Even though institutional support is significant in the thesis development process, submitting the thesis is still a challenge for some students. As shown above, some of the factors that hinder this step are insufficient financial resources and labor pressures (Dominguez, 2012; Thabran & Fajaryani, 2017; Tiwari, 2019). For this reason, institutions and governments have created programs and scholarships to economically support students during their academic life and to submit their thesis as a graduation modality.

On one hand, the BUAP offers different scholarships that aim to provide support to improve the conditions and possibilities of permanence and completion of studies by providing students with considerable financial support. Moreover, the office of the Vice-rector for Research and Postgraduate Studies (Vicerrectoria de Investigaciín y Estudios de Posgrado [VIEP]) offers a program to promote research and interest in graduate studies among undergraduate students. In these programs, students not only have economic support but also collaborate in research projects under the supervision of an active researcher member of the BUAP's Researchers Register. In this

way, students develop an invaluable experience that helps them by expanding their knowledge and options for future stages in their professional training (VIEP, 2020).

On the other hand, the government also offers scholarships to students so they can conclude their studies and the thesis. BUAP students can also apply for scholarships offered by the federal government as well as the state government of Puebla. Indeed, there are two scholarships that could help students during the completion of their studies and thesis preparation. The first one is the Elisa Acuña scholarship offered by the Secretary of Public Education (SEP for its acronym in Spanish) in the modality of Graduation (*Titulación*). This scholarship allows students who have completed or are about to conclude their higher education studies and who must complete their thesis to obtain the corresponding degree to get economic support that allows them to obtain their degree (Coordinación Nacional de Becas para el Bienestar Benito Juárez, 2019). Similarly, the Council of Science and Technology of the State of Puebla (CONCYTEP for its acronym in Spanish) offers a scholarship aimed especially at students who are developing a thesis to obtain their degree by providing them with considerable economic support.

In addition to financial support, there are also courses and support dedicated to helping students to write academic texts, such as the thesis. These courses are of great help to students because in many cases it is assumed that higher-level students "should already know how to write academic papers" (Hernández Zamora, 2009); however, this is not entirely true, and this way of thinking results in exclusive and limited practices that require a pedagogical intervention and specific supports to avoid an All-But-Thesis condition.

Finally, another aspect that motivates students to present a thesis is the honorific distinction university gives when completing the thesis. Even though students who did not fail subjects during their career and who finish their studies obtaining an academic average equal to or greater than 8.5

do not need to present the thesis, some students decide to present it to graduate with honors. This distinction is given by the university in two modalities: *Ad honorem* and *Cum Laude*. In order to obtain the *Ad honorem* distinction, the student must 1) conclude their studies with a minimum average of nine, 2) have not taken any subject, 3) submit their thesis on time. Similarly, the *Cum Laude* distinction is given to those students who meet the characteristics of the *Ad Honorem* distinction, but they must have an academic average of 9.5 (BUAP, 2015).

Altogether, all the institutional support, scholarships, and honorific mentions could motivate students to submit their thesis. Indeed, doing a thesis with a scholarship generates greater satisfaction, the same as developing it having previous research experience (Carlino, 2005). However, all things considered in the internal and external factors may block the submission of the thesis promptly. For this reason, administrators, teachers, and students must make efforts collectively to raise awareness of the importance of thesis writing (Erbay Çetinkaya & Yilmaz, 2017), but also develop critical thinking in order to understand the complexity of the context that influences this process.

2.5 Conclusion

This chapter reviewed the theoretical framework related to the different components that influence the development of an undergraduate thesis. The chapter began with the review of what a thesis is, by defining the concept, the EFL writing influence on it, and the guidelines to develop it in the LEI-BUAP. Then, it continued with the discussion of the critical thinking theory, which leads to the discussion of the internal and external factors that influence the development of a thesis. Finally, the institutional programs to help students to develop their theses and the motivator elements to submit the thesis were presented. In the following chapter, the research methodology will be described by considering the dimensions reviewed in this chapter.

Chapter III – Methodology

In this chapter, a detailed description of the method and design used to develop the research is presented. As it was presented in Chapter I, the main purpose of this study is to explore the Students' challenges to engage in thesis writing. In this chapter, relevant information about the participants, instruments, and procedures are outlined. After that, the description of the technique, instruments, and the data analysis procedure is presented.

3.1 Context of the study

This investigation takes place at the Language Faculty, one of the 24 faculties of the Benemérita Universidad Autónoma de Puebla. The faculty is located at 24 Norte street 2003 Humboldt, in the city of Puebla, and it offers not only graduate and undergraduate programs aimed to form competent professionals in the area of teaching and translation of foreign languages but also languages courses for both the university community and the general public as well as official translations and international languages certifications like the TOEFL ITP[1], Cambridge examinations, DELF/DALF[2], ÖSD[3], CILS[4], among others. As this investigation is focused on the undergraduate level, the degree in English Language Teaching (LEI) was chosen due to its large number of students compared to the other academic programs offered within the faculty of languages and its close relationship with the graduate program this thesis belongs to.

LEI is a 4-year program that has been offered since 2009 as part of the Modelo Universitario Minerva, substituting the previous program of Modern Languages (LEMO for its acronym in Spanish) with a and it had an academic upgrade in 2016 by incorporating the requirement of an

---

[1] Test of English as a Foreign Language – Institutional Testing Program
[2] DELF: *Diplôme d'études en langue française /* DALF: *Diplôme approfondi de langue française*
[3] *Österreichisches Sprachdiplom Deutsch*
[4] *Certificazione di Italiano come Lingua Strainera*

English Language Level of A2, changing the length from four-month periods to semesters, more academic writing workshops, an improvement in teaching subjects. As a result, its graduate profile states that the alumni would be highly competent teachers with knowledge of anglophone cultures with a B2 in English according to the Common European Framework of Reference for Languages (CEFR). Moreover, they would also be able to continue their studies in order to strengthen their personal and professional development (Facultad de Lenguas, 2016).

Commonly, LEI students have to develop a thesis during the last semesters of the degree; however, contrasting the number of new students with the numbers of graduated students, it can be seen that from the 359 new students in 2016 only 58 students got their degree (BUAP, 2020a). Not to mention that that last number represents the total number of people who obtain their degree, which implies previous generations also were considered in this number. So, the importance of this study is to understand the reason why this number is so low by exploring the students' challenges to submit their thesis in order to get their degree.

3.2 Participants

The participants were 6 students of the LEI program who were taking the subjects of research seminar II and they were close to finishing the curricular program of the degree. Their range of age was between 21 and 23 years old. According to the LEI applicant's profile, those students started the program with a knowledge of the basic concepts and theories of Spanish and general culture, in addition, they had to have an A2 level in English, so this level had to be boosted during the program. Moreover, these students have to have the aptitude for language learning, analysis, and synthesis capacity that allows them to have the communicative ability to express thoughts, ideas, and opinions in a clear, precise, and appropriate way. Finally, those students have already taken the subjects related to the target language, teaching, linguistics, culture, and general

university education of the curricular program of the LEI, so they were focusing on the subject of research seminar as well as a professional practice or social service and, in some cases an elective subject.

3.2.1 Sampling

As mentioned previously, the participants for this study were students who were taking the Research Seminar II class and writing their thesis as part of the requirements of the subject. According to the course program of the LEI, 10 sections of the subject of Research Seminar II were offered in the semester of Spring 2021. Each section could have a maximum of 20 students, but this number is not usually reached and sometimes each section might have just 6 students on it. Due to the lockdown situation derived by the COVID -19, it was decided to select a participant from a conveniently available pool of respondents, by applying a Convenience Sampling. This probability sampling was chosen due to the limited availability of participants and limited communication derived from COVID-19. As Katayama (2014) describes this sampling, the selection of the sample participants has to be carried out arbitrarily among the units that are at hand, so an email was sent to all the professors who gave Research Seminar II class, as well as some professors who had given the class of Research Seminar I the previous semester -and now their students, should be taking research seminar II - to ask for their help to communicate their students to participate in this study. 6 students were interested in participating, they contacted the researcher via email and were interviewed according to their time availability.

3.3 Methodology

In order to understand the challenges in the thesis development process, it is necessary to explore the students' beliefs and opinions about this process. That is the reason a qualitative approach was chosen for this investigation. According to Creswell (2014b), this approach "is a means for

exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (pp. 294). At the same time, Creswell (2013) had defined a qualitative approach as

> "an inquiry process of understanding based on a distinct methodological approach to inquiry that explores a social or human problem. The researcher builds a complex, holistic picture; analyzes words; reports detailed views of participants and conducts the study in a natural setting" (p. 300).

Moreover, an advantage of the qualitative approach is that it recognizes the inherently subjective nature of social relationships (Olsen, 2004), so this approach is the indicated to understand and explain the challenge students face to develop a thesis by collecting data based on their words about how they experience the phenomenon (Bhandari, 2020; Creswell, 2014a).

3.4.1 Case Study

A case study involves the study of a case within real-life, allowing an in-depth exploration of a contemporary context or setting through multiple sources of information like observations, interviews, audiovisual material, and documents and reports (Creswell, 2013). Moreover, Nunan (1992) considers a case study as a limited type of ethnography since it resembles ethnography in its philosophy, methods, and concern for studying phenomena in context.

With this in mind, a case study is suitable for this study to catch the complexity of a thesis development process because it takes descriptive-interpretive elements more seriously by having an affinity toward descriptive goals (Given, 2008).

3.4.2 Design

This study collected data from a particular group of students who were writing their thesis in the semester of Spring 2021, so a cross-sectional study was chosen for this study inasmuch as it is

easy and fast to conduct because this design involves looking at data from a population who share a particular variable of interest at one specific point in time (Creswell, 2014b; Katz, 2009). In other words, observation of variables like cases, individuals, or other types of data, is carried out in a single moment when, as Zangirolami-Raimundo et al (2018) described, "the researcher records a 'photograph' of the facts (variables) of interest and not the 'movie' of its evolution" (p. 357).

The cross-sectional study was chosen due to its advantages of; 1) allowing the direct observation by the researcher of the phenomena to be investigated, 2) performing the information collected in a short time, and 3) producing faster results than the other designs. All of these without the need for follow-up of the participants (Zangirolami-Raimundo et al, 2018)

3.4.3 Purpose

This study's main purpose was to explore the Students' challenges to engage with a thesis development. These challenges were examined and discussed to discover something new and/or interesting that may lay the foundations for further research in the area based on a phenomenology approach.

According to Oxford Reference (2018), exploratory research is "the preliminary research to clarify the exact nature of the problem to be solved". At the same time, Macmillan's dictionary (2020) defines exploring as the act of examining or discussing a subject or idea thoroughly, so we can consider that exploratory research aims to investigate a problem that is not clearly defined to have a better understanding of this existing issue. However, as Swedberg (2020) mentioned, "doing this type of research is risky by definition, since it is not possible to know in advance if something novel will come out of the whole thing" (p. 2), but as this issue is studied using a critical view, the results may provide a different perspective for students, teachers, and researchers who are interested in the thesis development process.

3.4.4 Technique

The strategy used to implement a plan to answer the research question of this study was the interview. According to The SAGE Encyclopedia of Qualitative Research Methods (Given, 2008), "Interviewing is a conversational practice where knowledge is produced through the interaction between an interviewer and an interviewee or a group of interviewees" (p.470). As this study is qualitative research, the instrument for data collection chosen par excellence was the interview, due to their particular usefulness to understand the meaning of what the interviewees say by pursuing in-depth information around a topic (Creswell, 2014b).

The interview is one of the most common ways of producing knowledge in the humanities not only for its flexibility and control over the order of the questions but also for its particular usefulness to understand the meaning of what the interviewees say by pursuing in-depth information around a topic (Creswell 2013,2014b; Kvale, 1996) establishes a series of steps to conduct interviews as a data collection source. The first step was to decide the research questions that would be answered, so it was necessary to decide the form of the interview: Structure, semi-structured, and unstructured.

3.4.5 Instrument

The research instrument is the tool used to collect, measure, and analyze data. As was mentioned in the previous point, Interviews range from the tightly structured format of standardized survey interviews to the in-depth interviews or unstructured interviews; however, there is a central point where the organization of topics is less tightly formatted but keeping the structure in mind, this is the semi-structured interview. Brinkmann & Kvale, (2015, as cited in Denzin & Lincoln, 2017) provide a clear definition of semi-structured interview by considering it as:

"an interview with the purpose of obtaining descriptions of the life world of the interviewee in order to interpret the meaning of the described phenomena" (p. 6)

As most qualitative research interviews are semi-structured as a consequence of the agenda being set by the researcher's interests (Flick, 2017; Given, 2008), and as this study needed to have a flexible instrument where the interviewer would be free to ask for clarification, the semi-structured interview was the best option.

3.5 Research instrument

Once the form of the interview was defined, the next step was to create the questions that would be asked by the participants, so dimensions of thesis development challenges were identified in chapter II to create a core analysis where these dimensions were defined. Table 3.1 explains briefly the categories and their operational definitions.

Table 3.1

Operational dimension chart

Dimension		Category	Operational definition
Critical thinking	Internal Factors	A) Research background	Students' previous experience in researching information, understanding research methodologies, and analyzing data to write academic papers
		B) English Language Proficiency	The student's ability to use the English language to understand and communicate ideas in written academic contexts.
		C) Student's attitude towards writing a thesis	Students' settled way of thinking or feeling about engaging, developing, and finishing their thesis; typically reflected in their behavior
		D) Psychological issues	Students' psychological disorders caused by the thesis development may affect their mood, thinking, and behavior.
	External Factors	A) Family influence	Students' family emotional support help students by motivating and sometimes guiding them to develop their thesis.
		B) Socio-economic status	Students' social responsibilities, job duties, and economic standing may impact the development and conclusion of the thesis
		C) Thesis supervisor relationship	Students' academic relationship with their thesis supervisors when asking for guidance, suggestions, opinions, and feedback about the thesis.
		D) Unforeseen situations	An unexpected and often unwanted event that may strongly impact students' thesis development by forcing them to take an undefined break
	Institutional Factors	A) Institutional support to help students to write a thesis	Institutional programs and resources are offered to both develop students' research abilities and facilitate information access.
		B) Elements to motivate students to submit the thesis	Institutional support may help students to submit their thesis by mitigating economic challenges and motivating them to opt to choose this graduation modality.

The first dimension is focused on the internal factors that a student may face during the thesis development process. The first category, Research background, is aimed at knowing about the

research experience that the students have had in their academic careers. Then, English Language Proficiency is aimed at the English language proficiency students require to understand and express their ideas in an academic context. Then, students' attitude towards writing a thesis is aimed to know the students' way of thinking and feeling about engaging, writing, and submitting their thesis. Finally, psychological issues are aimed to explore the students' psychological issues a thesis may have caused them when they have to write it at the BA level.

The second dimension is focused on the external factors that may positively or negatively influence the student when writing the thesis. In the first place, Family influence is aimed to know about the emotional support that family may give to the student during the thesis writing process as well as the advice students may receive from siblings or parents who have submitted a thesis if the case. Then, Socioeconomic status is aimed to know the sociological and economic factors that may affect the thesis development process. Next, the Thesis supervisor relationship is aimed to know the influence that the thesis supervisor may have on the student when writing the thesis by considering the proper guidance in academic research, advice, and suggestions to continue writing the thesis. At last but not least, Unforeseen situations are oriented to know the unexpected and not planned events that may cause the student to slow down or pause the thesis development process.

The third dimension is focused on the institutional factors that directly support the student to develop the thesis and submit it. On one hand, Institutional support to help students to write a thesis is aimed to know the elements that may help students to start writing the thesis as well as guiding them and supporting them during the process. On the other hand, Elements to motivate students to submit the thesis are aimed to know the elements that may facilitate students to finish and submit the thesis as a graduation modality in the LEI.

14 Questions for the interview were obtained from operational definitions by identifying the aspects where students may face challenges when developing their thesis. (See Appendix I for the initial version of the instrument)

3.6 Piloting

In order to have a validation of the instrument, the instrument guide was submitted to the revision of two experts on the subject. According to Taherdoost (2016), this procedure is known as Content Validity and it "involves evaluation of a survey instrument to ensure that it includes all the items that are essential and eliminates undesirable items to a particular construct domain" (Lewis et al., 1995; Boudreau et al., 2001, as cited in Taherdoost, 2016). As was explained in the instrument design, the first step consisted in identifying the dimensions and categories that were identified from the theoretical framework. After that, Questions for the instrument were developed with the guidance of the thesis supervisor, Dr. Benjamín Gutiérrez Gutiérrez. Once the instrument had his approval, the resulting instrument and the interview guide were submitted to the judgment of two expert doctors on the subject: Dra, Pamela Olmos Lopéz and Mtra. Fatima Encinas Prudencio. The first to give feedback was Mtra. Encinas correct the clarity and redaction of questions 4, 5, 6, and 8. Then, Dr. Olmos improved the redaction of questions 1 and 2, as well as suggested combining questions 3 and 4. Finally, the last revision of Dr. Gutierréz checked the clarity and also suggested combining questions 11 and 12. The result of that expert judgment was conducted in the modification and improvement of the instrument to have 12 questions that would be asked to the participants. (See Appendix II for the final version of the instrument).

3.7 Procedure

First of all, the number of Research Seminar II classes available in the LEI during the semester of Spring-2021 was consulted on the faculty's webpage (http://www.facultaddelenguas.com/lei-

programacion) in order to know the population available for the study. Next, once the instrument was ready, professors who gave Research Seminar II class in Spring 2021 – and two professors who gave Research Seminar I in Autumn 2020 - were contacted via email to ask for permission to apply the instrument to one of their students. Once the professors accepted and announced the calling for the participant, the interested students were asked to sign up a consent to participate in the research, their personal information such as name, e-mail, and ID was gathered but, in order to protect the personal information of the participants, their names and first digits of their ID were altered for this study. Each student had a scheduled appointment to be interviewed in the following days. All the interviews were recorded, and all their answers were transcribed in word documents to be able to manage and analyze the results better.

3.8 Data Analysis

After having piloted, improved, and carried out the interview, all the data were transcribed by using the following codification in word documents:

Table 3.2

Interview Annotations

Key	Meaning
[	Overlapping speech
Italics	Indicates word spoken emphatically
(unintelligible)	Utterances that could not be understood
(?)	The accurate transcription of a word is in doubt
___	Noticeable pause in the speech
Underlined	Hesitation

Once the transcriptions were done (see Appendix III for one example of transcription), transcription of the interview was categorized to perform a deductive coding using specialized software for the qualitative analysis, ATLAS.ti® (see Appendix IV for the codes used in the coding process as well as their definitions). This coding was chosen due to it allows to establish a link between theory and observation and allows to deduce from the theory the phenomena object of observation.

Figure3.1

Coding process
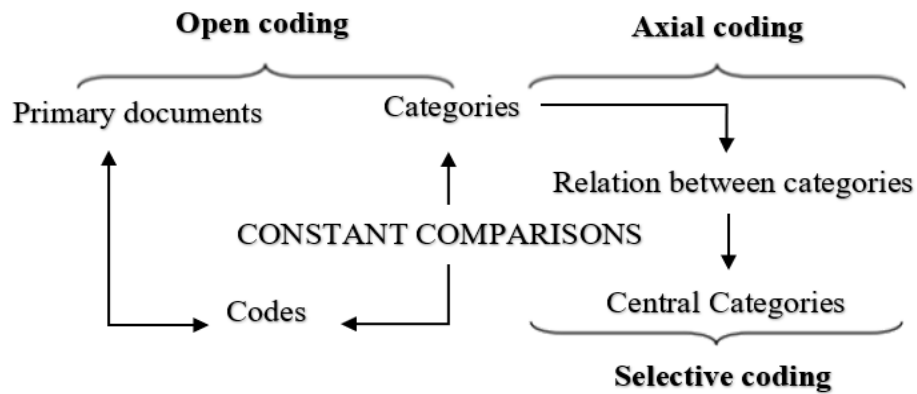
Taken from de la Cruz Villegas et al (2021)

First, as the figure shows, the documents were uploaded to the software to perform an open coding where the data was fractured to bring to light the thoughts, ideas, and meanings they contain in order to discover, label, and develop concepts. Important to mention that all the codes were organized by color for better identification and easier understanding, so the codes belonging to the Internal Factors dimension were assigned the green color, those belonging to the External factors dimension were assigned the yellow, and finally the codes of institutional factors dimension were assigned the purple. After that, axial coding was done by establishing hierarchical relationships

with the subcategories –properties and dimensions– around a category taken as the axis. Finally, selective coding by establishing the connections between categories to obtain central coding.

This chapter presented and justified the methodology, methods, and instruments used to gather the data. At the same time, the procedure and piloting for the instrument was explained as well as the data analysis process. Findings from that analysis of data are presented and discussed in the following chapter.

Chapter IV – Findings

This chapter introduces the analysis of the data coming from the interviews done with LEI students. First, a content analysis was done with the interviews, each question was exanimated and explained by considering the dimensions and categories considered in the previous chapter. Then a thematic analysis was done by using ATLAS.ti, in this approach, deductive coding was done to establish the relationship between categories and central categories. The result of this coding was the identification of common themes, ideas, and patterns of meaning that come up repeatedly.

4.1 Internal Factors content analysis

The student's knowledge, skills, way of thinking, among other internal issues are considered internal factors that influence the thesis development process. Several authors (Gudiño Cuevas, 2015; Lestari, 2020; Puspita, 2019; Sánchez de la Torre, 2010) have studied how these factors positively and negatively influence the writing of the thesis. Some of the most studied internal factors are those related to the attitude of students and its influence on writing, Suyadi et al (2020), However, a determining factor in this context is foreign language proficiency, since the first challenge students face when writing the thesis is their English proficiency level (Lestari, 2020; Thabran & Fajaryani, 2017). All these factors based on critical thinking were considered within this dimension, from which four categories have been derived: 1) Research background, 2) English Language proficiency, 3) Student's attitude towards writing a thesis, 4) Psychological issues

The first six questions of the interview were obtained from the operational definition of said category. Each question was analyzed, exposing the most relevant aspects of each answer. At the end of each response, a discussion of the results was done.

4.1.1 Research background

Two questions were developed for this category, both questions were aimed to know the Students' previous experience in developing other academic papers, looking for information to be used in the literature review, selecting and using the suitable research methodology for the study, and analyzing data to be explained to the readers.

The first question had the purpose to know the students' experiences looking for bibliography, understanding methodologies, and analyzing data in order to explain their level of confidence in developing academic papers. The answers are written as they were expressed.

Q1P1: *"... I took this class that is called___ 'Metodologias de la Investigación'... there I learnt a little bit about, mmm, how to, em, write or citate, eh, eh I'm sorry, quote different authors, and so one and forth (unintelligible)..."*

Q1P2: *"I have taken 2 subjects... Academic Writing and ... writing focus teaching(?), and these both helped me to develop some aspects like formalities, eh, words that help me to write in a formal way and correctly of course..."*

Q1P3: *" I think methodology ... "Taller de lectura y escritura___ Académica" ... they helped me to find, uhmm, important information___ how to do a, and the, a research in a correct way. How to write also, informal and academic..."*

Q1P4: *" ... the activities ... that have helped me most are the ones that are comparing previous thesis for more classmates ... as we have done in research seminar I and II... I have only taken the ones [classes and courses] that are the program of my career..."*

Q1P5: *"... before the seminar, eh, were the academic writing workshop and also ... two different courses and they help me to understand the structures of academic wr-,*

ehm, text and how to develop them. And also, I learned in those courses to investigate

in different resources. Citing was the most valuable"

Based on the answers, there seems to be a little interest in looking for extra resources and support to develop academic papers. The student just takes the classes provided by the major and with the knowledge given by their professors. This could imply they do not expand their points of view about another type of methodologies and investigations related to the same topic they would like to develop, provoking a low research experience to aim their thesis project. This finding confirms what Lestari(2020) and Tiwari (2019) say about poor research knowledge background students have when delimiting their topics for the thesis and choosing the most suitable methodology for their studies. Even with the imitated number of classes and courses they have taken, participants agreed these classes helped them to understand and get involved in academic writing literacy by writing in a formal way and performing research of academic resources. However, these classes just provide the tools to the students to start developing academic papers like the thesis, practical work is still needed to properly develop the student's research skills, particularly when reporting their findings. This issue is closely related to the aspects of selecting the research methodology and looking for resources, if the student does not comprehend all these steps of the research, reporting findings will be a hard-working process due to the extensive amount of data that could make them confused about the process of reporting the results after they got the data. (Lestari, 2020). In brief, the classes provided by the LEI program are a good support to introduce students to the investigation and academic writing world; however, these courses should be reinforced with more practical work to consolidate the skills and knowledge obtained during the classes.

The second question asked the interviewers about the academic resources they had used during their career and how these resources have helped them to write their thesis in order to contrast their

practical experience in developing the thesis with the theoretical experience described in the last question.

> Q2P3: *"… books and… also other research… [that I use] like a guide, so I looking (sic.) for, ahh, a scientific or a master who already done…"*

> Q2P5: *"… I have used … books, magazines, journals, <u>ehh</u>, websites and platforms. For example, also could be google, academic google, google academic…"*

> Q2P4: *"… I've used, eh, mostly articles from journals … taken from different websites and even some books that I have borrowed from the library at school…"*

> Q2P2: *"… I have [used]… apps … I can, up, download to my, to my cell phone or computer… They have helped me in some, some aspects but I considered the setup(?) this machine so is not at all reliable… [also] an special book that my, my teacher provide me … that that book helped us to, to guide us during the subject'…"*

> Q2P1: *"… I had to read a book, that was about, ehm, research and, and I think I learned some things from that book. But that's basically everything I've done how about it…"*

According to the answers provided by the students, there is a noticeable lack of academic resources. All participants mentioned using books to guide them in writing their thesis. Some others mention carrying out a contrast of ideas with other academic writings such as a journal or other theses. This may mean that these students present a shortage of practice in writing academic papers as they have limited knowledge of research resources. Many of these shortcomings can be reflected in the introduction writing, theory understanding, and the interpretation of results. As Criollo (2005), Lestari (2020), and Thabran and Fajaryani (2017) indicate; the most difficult part

when developing a thesis with low knowledge of the study area is the choice of topic, and therefore the choice of a correct methodology. Also, if we add the lack of practice to paraphrase and quote ideas from other authors, students may fall into an issue of unconscious (or even conscious) plagiarism when copying ideas from other authors (Lestari, 2020). Finally, if the first three chapters of the thesis present inconsistencies and areas of opportunity, the chapter of the discussion of results will be affected because the student may not know how to correctly interpret the stack of data by not having a proper relationship between chapters of thesis (Lestari, 2020; Thabran & Fajaryani, 2017; Tiwari, 2019). Another resource to highlight is the use of apps like Grammarly to support their writing; however, the same participant mentioned the use of this kind of electronic resource is not reliable at all since it just provides corrections in vocabulary. Besides, the use of this kind of app is more related to English language proficiency.

4.1.2 English Language Proficiency

For this category, one question was developed. Continuing with the numbering, this question was aimed to explore 1) the students' perception about their English language proficiency, 2) how this level may help them or hindr both to write their thesis chapters and 3) the students' self-evaluation about their improvement areas in their chapters. Answers are written as they were expressed

> Q3P1: "...I don't think the quality is good enough ... I got a nine last semester... I need to read more articles and more books ... and I wrote these chapters in like ... like in one hour, two hours ... I think that's the only part I, I can say I'm proud of because ... I got a good grade... "

> Q3P2: "I think I need more time to, to develop those abilities ... I think it's not enough two, only two semesters about writing academically and it was not enough for me ...

the quality of my thesis at the end was not good at all…. I need to, to, to take into consideration more aspects such as the structure of my thesis…"

Q3P3: "… I feel like, like I don't have the enough information to, to write. and I know how to do it, but I don't know how to start … I feel like I need to do it better. And maybe I could do it better if I, if I can practice before to start writing a thesis … I need to improve the connectors, the relationship between one chapter and … Paragraph, one paragraph in another paragraph. In the second chapter more, more, resources because sometimes we don't know how to, to find the correct information … And, in the capture 3 … how to, to write in a formal way…"

Q3P4: "…I think, I have blocked … even though my, I think my writing skill is good, I always need to improve. I think since chapter I, since even the introduction … I think that we need (sic.) is [practice to overcome] the lack of experience for writing … I think the most challenging part is to be able to summarize different resources in order to make it be my own information to avoid plagiarism."

Q3P5: "I think, the most important thing to improve is ... how to cite every quote. … also, the structure … the results are [also] a difficult part because you have to explain the, your results and the graphs … [it] would be good to, to learn more about all those details … Also [I need to improve] the writing style in order to be more academic…"

As can be seen, the participants consider that they have a low English language proficiency level, this could be due to low confidence in their ability. Participants also mention a lack of information and practice to write in a foreign language, the proper use of connectors, as well as inadequate knowledge of the conventions used for writing academic texts such as the thesis. All these aspects

may lead students to misunderstand what the theory presents, so this finding confirms what Lestari (2020), Puspita (2019), and Thabran & Fajaryani (2017) mention about the impact of low English language proficiency when writing a thesis. In addition to this, Hassan Al Badi (2015) and Puspita (2019) consider that interference of the first language in the students may complicate them to understand the content of the theories, hence they have trouble determining the idea when writing or hesitate to paraphrase and summarize other's work, and thus they easily commit plagiarism, just like participant 4 considered.

4.1.3 Student's attitude towards writing a thesis

The third category of internal factors concerns the student's way of <u>thinking or feeling</u> about the development process of a thesis. These attitudes are typically reflected in their behavior which may cause both delays in delivering advances of the thesis or motivation to keep developing it until submitting it.

Question four is focused on this category, this one requested the participants to make a comparison of their beliefs before and after starting writing the thesis to know how the thesis might have changed the student's perspective towards writing the thesis. outstanding parts of the answers are presented below.

> *Q4P1: "… I didn't like it and I didn't want to, so probably that's why I am not doing a good work … And I think that's the way my beliefs and thoughts influenced this, eh, well my thesis."*

> *Q4P2: "… when I was starting my, my thesis I didn't know how to start, or I didn't know that I was doing the right things… I was confused even when the teacher gave me the feedback… I felt, I, it was troubling… I was struggling a lot to develop all those*

things [structure of the thesis, literature review, use of methodology, explanation of results]. I was trying to guess… it was really confusing."

Q4P3: "… I was feeling that I can do it, I can write this thesis without problem, and then I feel anxious, stress like I don't have, <u>ahh</u>, I don't have the motivation to write… It's just ___ a lot of stress… I don't want to write anymore, but… you have to because it's a subject. You need the qualification or mark."

Q4P4: "… I was feeling like kind of confident because I thought it was going to be easy and because … [it] is the topic that I like that I can get into it, but as I started writing it, I started finding different challenges and starting to feel kind of concern because I wasn't sure about where my thesis … was going to. But with the help of my teachers, I am feeling confident again…"

Q4P5: "… I felt like I had no idea about … what to talk about, or, or how… difficult to choose a topic… I think it was very difficult because of … the number of pages that you have to write but <u>ehh</u>, ___ <u>as</u> I have been developing it, I find it more, more easy to do… Now I think it's a very interesting way [of assignment] and I think it's part of our … professional development… even if we don't not present it… I think I have now <u>I</u> ___ I enjoy [it].

Based on the answers, the findings of the previous questions regarding the doubt and uncertainty of how to start writing the thesis are confirmed. We can note that several participants were fearful by considering that they did not have enough academic preparation to start writing the thesis, some of them were even reluctant to start writing the thesis. This could imply that when they begin to write their thesis on the subject of Research Seminar I, they do not have the sufficient capacity to

structure their arguments resulting in a lack of a good foundation in their writing. This finding confirms what was said by Thabran & Fajaryani (2017) who consider that many students may not get to the level that is required to conduct research and write a thesis. Besides, if this condition is maintained, it could lead to a situation of All Buth Thesis (Rodríguez, 2013, as cited in Abreu, 2015), which in turn would delay the submission of the thesis. However, we can also note that some students found the motivation to continue writing their thesis thanks to the support of their professors or interest in their research topic. This supports the idea of Lestari (2020), who ensures that motivation plays an important role during the thesis writing process. At the same time, she claims that if students have a strong desire to complete the thesis, they can easily solve some challenges that would come up in the path; but if the students feel that they had no strong desire to finish it, it would be common to find stumbling blocks in the path

4.1.4 Psychological issues

At last, the fourth category of internal factors dimension regards the Students' psychological issues that the thesis development may cause them, no matter if these issues affect their mood, thinking, and behavior in a good or bad way.

With this in mind, question number 5 sought participants to make a comparison between how they had felt before starting writing their theses and how they were feeling after experimenting with the development of this academic paper with the intention to discover the psychological aspects that the thesis writing process has to provoke to the students. The answers are written as they were expressed.

> Q5P3: "... sometimes I feel that I don't have enough vocabulary to write my thesis, even if I choose the topic... like when you can do it something, like, like that you need help, but you don't have help, helpless, unable also

Q5P5: "... having experience of writing a thesis is like ... the summary of ... academic writing... [now I know] have to investigate and, and write in a coherent way, and find a topic ... "

Q5P4: "I think it changed, when writing ... I used to write ... very simple, in a simple way and now ... I put more effort into writing not just an essay or another kind of academic paper... "

Q5P1: "...now I pay more attention to details like, eh, ___ mmm, quotation... I would say just quotations

Q5P2: "... I was just following a simple pattern. It was just an easy one: introduction, development and conclusion. but now I think more, eh, all those parts must be clear enough to go beyond to the next part.

Based on the answers, there are divided opinions regarding the impact the thesis may have on the participants' mood and/or way of thinking. On one hand, some participants consider that their mood was negatively affected after they started writing the thesis as they began to feel anxiety, frustration, and discouragement. On the other hand, the rest of the participants declared that by experiencing the process of writing a thesis not only their motivation to improve their writing increased, but also their ability to investigate for other academic writing texts by considering that this process gave them a sense of optimism and greater preparation to face future challenges in writing academic papers. These findings agree with Lestari (2020) who considers that this process implies anxiety for students, especially when they feel they don't have enough English level to express clearly their ideas in the paper. It is clear that a student who was reluctant to write the thesis would be frustrated or stressed during the writing process. Just as Abreu (2015) mentioned,

some of these negative issues may derive from an All-But-Thesis condition. However, if a student who was optimistic and prepared ends up with a more enthusiastic attitude that is reflected in the learning of research methods, which can be applied in other academic writing. This agrees with Thabran and Fajaryani (2017) and Lestari (2020) who consider that motivation, good planning, and wise time management play an important role during the process.

If students have a strong desire to complete the thesis, it would be easier to solve minimal factors that may interfere with this process. Certainly, the internal factors play an important role during the thesis development process, but they are just one part of the challenges a student may face. Some of these factors have their roots or may interact with external factors that are not entirely the student's issue.

4.2 External Factors

Along with the internal factors, there are external factors that also may have a similar or even stronger influence on the thesis writing process. At the same time, these factors are closely related to the internal factors inasmuch they interact between them and sometimes they could be the cause of certain internal factors. In this study, family support, students' non-academic duties, student-thesis supervisor relation, and even health problems are considered as the categories that influence the students' thesis writing. These categories were organized into four aspects: 1) Family influence, 2) Socio-economic status, 3) Thesis supervisor relationship, 4) Unforeseen situations. The following 6 questions of the interview were focused on getting information about these dimensions of critical thinking factors.

4.2.1 Family influence

The first question of this category, question 6, has the purpose to know how the students get help, guidance, or emotional support from their relatives and how that support may impact their thesis

writing process, no matter if this support was academic or just motivational. The answers are written as they were expressed.

> *Q6P1:"... they know that I am not taking this project seriously and they know why....sometimes my brother, help-, helps me to, right now I have to transcribe, <u>eh</u>, an interview and he is helping me to do that...*

> *Q6P4:"... my family wasn't really influencing my, my writing experience because I was on my own....[but now] they give me [emotional] words ... [when] they see me kind of stress ... I don't really ask them for help to writing [sic.] because... they don't speak English so they don't really master the topic that I'm working on..."*

> *Q6P2:"...if my family's environment is OK I can develop more ideas or taking the consolation more aspects but if not I guess, eh, it's even, it's, it's more difficult [to do]... it affects me a lot when I am not in a good mood."*

> *Q6P3:"I feel like my family gives me enough support but sometimes I feel like I need just space..."*

> *Q6P5:" I think it, your family can affect in a positive and negative manner....They're like a motivation for you, but also if they don't like, understand you and... they think like you are doing nothing because you are, you spend a lot of time in the computer, and they don't understand what you're doing, that can also affect your motivation. Your feelings in a negative manner"*

According to the answers, there seems to be great emotional support for students from their parents. Much of this motivation comes in the form of cheering or a stable home environment. This could imply that a healthy family coexistence environment favors good writing performance

by pushing them to keep writing and not to drop it, just as Dominguez (2012) considers. In addition, this support is essential in the formative process because it ensures that the student can accomplish his goals (Gudiño Cuevas, 2015); notwithstanding, some participants consider family also could have a negative impact on their thesis development since their parents don't understand that thesis writing is a complex process. So, there seems to be a demerit of the student's work by their parents, provoking a demotivation of the student for deterrent parent's attitudes. This agrees with the idea of Frankl (1984, as cited in Dominguez, 2012) who considers that the lack of a strong committed network with the family, combined with isolation, may lead students to an All-But-Thesis status

4.2.2 Socio-economic status

In this category, one question was developed to ask participants about how other activities like work, family responsibilities, and other extracurricular activities may interfere with their thesis development process. Answers are displayed as they were expressed.

> *Q7P5:"…I think, all those problems or challenges, can help… well, they have help me to, to improve myself into ___ to feel motivated to do it… I think the challenges are the main factors or motivate-, motivators to achieve my goals"*

> *Q7P1:"… I had to start working since… a year before I started this degree… I would say that this really affects my thesis project because I cannot spend a lot of time, on my project…"*

> *Q7P2:"…when I was writing my thesis… I had a, two groups [of students] to, to work with and … I was having a lot of work to do and I didn't have enough time to write*

efficiently. I think that kind of responsibilities ... stop me to develop more ideas or have

more content."

Q7P4:"Not really because, the only thing I do right now its school. I don't work, I

don't have economic responsibilities, so I think that's a good point for me or an

advantage since my only responsibility now it's school, writing my thesis.""

Q7P3:"I think there is no actually relationship with that kind of problems ... I think it

is not influenced in my, in my thesis or how, how I feel about it"

According to the answers, there seems to be little impact of this factor on thesis writing, but students who are affected by this issue consider that the main factor that interferes with their thesis development is undoubtedly the work. They consider that having a job affects them by reducing the time they dedicate to writing their project. As Thabran & Fajaryani (2017) mentioned, professional responsibilities and job duties could interfere in the thesis development process by decreasing the time spent on writing and research and generating extra stress to the students. In addition, performing a job while studying represents a great challenge since it implies that the student has other financial responsibilities to fulfill since these students probably have to fend for themselves. This, in turn, generates extra pressure, so we can see how they regard thesis writing as an economic burden for them (Tiwari, 2019).

Of course, these activities require time and attention but as Dominguez (2012) mentions, a proper balance between work and school responsibilities will bring less pressure and internal/external conflict. In addition, although these challenges may pose a great obstacle for the students who develop the thesis, they also could mean a great opportunity to improve and even take advantage

of this situation, for example, they could obtain their thesis topics and/or participants from their work areas.

4.2.3 Unforeseen situations

For this category, question 8 was aimed to know the unexpected situations that have impacted directly on the student's academic development and how these ones have challenged students to write their theses. The participant's answers are shown as they were expressed.

Q8 P1. "All the articles and books that I had to use for my first two chapters, and chapters that I'm writing right now, I had to look for them, in the Internet because I couldn't, eh, go to a library. So, I would say for me it was more difficult, to, eh, look for information."

Q8P2:"Of course they stopped me because I was paying attention more to my other subjects than at the thesis. I think those aspects such as, ill, of course COVID, and other familiarity, family, familiar issues stopped me "

Q8P3:"...just the pandemic because I have to work only in the computer ... [also] the time ___ because the teachers sometimes think that you have a lot of time because you don't go out and you don't do another things..."

Q8P4:"...the main problem is the gathering information... sometimes we need to look into physical books... I have to focus, or to be able to work only with things that are on the Internet. And sometimes, they're not free."

Q8P5:"...it was a challenge for me to find or to complete my investigation and the resources I was going to use because I could not go to the library, and also I didn't know how to use the digital library... And also because of the online classes ___ it was

70

difficult to get like the, that support from your teacher… and also to find out, to find a

person that can, or that want to help you with your thesis…"

Based on the answers, there seems to be a negative tendency in the impact of unforeseen situations in the writing process, as the main issue is the lockdown caused by the COVID-19. For this reason, schools, universities, and of course libraries have been closed for more than a year, provoking students to migrate to electronic platforms to look for resources. We can see that this situation has not only impacted the students' academic life, particularly in the thesis development process can be observed (Rehman, 2020; Rusu, 2020) but also widened the socioeconomic gap between students who are fully connected to the internet and those who are not.

Moreover, the lockdown and online model of classes have caused students psychological issues like stress, anxiety, and frustration as some participants mentioned. This adds to the stress caused by the academic pressure to submit a thesis advance in research seminar classes and by the hard work that represents developing a thesis.

4.2.4 Thesis supervisor relationship

Finally, the fourth category of this dimension regards the students' academic relationship with their thesis supervisors. As this category is considered the most relevant and with the most direct impact on thesis development, it was necessary to develop two questions for this category to focus on how this relationship may affect students' thesis writing.

Question 9 was oriented to know the students' way of thinking and feeling about the attitudes, knowledge, and motivation that their thesis supervisors transfer to them to develop their thesis projects. Answers to this question are written as they were expressed.

Q9P2:"… when I was taking Seminary I, I had a bad relationship with my supervisor because this teacher was pushing us to just deliver something than he wanted… he was thinking that I, we were prepared to do it so I, during that process I was struggling a lot. … but nowadays I consider my teacher is relaxed and is taking into consideration the situation that we are, eh, having right now… this teacher is, is helping us a lot…"

Q9P3:"…I feel better because my teacher told me the things … in a good way, and she give me advices or <u>like</u> ___ comments. I feel like I can do it, but in the last semester my relationship with my other teacher was like kind of no good because I didn't see her like 2 weeks … and also, she didn't, she didn't read my chapter … Now my teacher read my chapter and tell me like a specific point that I can, I can change or like taking notes."

Q9P1:"… I actually don't have a thesis supervisor, I only have my teacher, well my professor. And I think I have a good relationship, but the thing is that sometimes, eh, communication wasn't well… it was an issue … I lost a lot of time [because of it]… [but] I wouldn't say lack of support… I would say more like a communication problem [because professor did not explain well]."

Q9P4:"… I think that we are, we have the confidence to, I have the confidence to ask her for help and also, she has the confidence to show me my mistakes and to help me with everything I need on my thesis. I think having her as my teacher is been real support for me because maybe it was another teacher … it would be a bit harder for me to talk [or]… to ask for help.

Q9P5: "I think my thesis director influenced me in the way that I had to make my best,

my best to write… he motivated me … and also gave me like a lot of tips and feedback

As can be seen in the answers, professors play an important role in determining the student's motivation in academic writing. Students with a good relationship with their professors tend to be motivated to continue their writings; however, we can notice students with a bad relationship tend to be more reluctant to complete their writings and solve the feedback given by their professors. This finding confirms what Dominguez (2012) claims when he mentions that the thesis supervisor is a key element in successfully guiding the student through the dissertation experience. Also, he agrees that a thesis supervisor can assist and motivate by taking a genuine interest in understanding the academic and individual skills of the student just as participants mentioned. However, as some participants mentioned, sometimes the relationship with their supervisors is not so good, in consequence, these students feel unconfident to ask for clarification and guidance. This finding agrees with Chou's (2011, as cited in Hassan Al Badi, 2015) and Tiwari's (2019) results that consider that one of the main complaints students make is about the uncooperative behavior of supervisors by considering they do not show any sympathy to the researcher and always speak angrily when they talk about the challenges of the thesis. For this reason, professors and students must try to develop a positive rapport for optimal guidance during this process (Morfinez Cortes, 2017).

At the last, question 10 asked the interviewees about the challenges they could have had when dialoguing, receiving feedback or instructions from their thesis supervisors as well as knowing the solutions students implement to overcome those issues. Answers are presented as they were expressed.

Q10P3: "the outline and the vocabulary is the <u>most</u>… challenging [part]… [also] my material because sometimes the sources are not … able to use in a thesis… [so] I'm trying to find another theses … [to know] how [those student] did it and … use a dictionary to find the correct words to say something… "

Q10P5:"… [my professor] wanted like more resources, more recent resources so I had to look for them in different platforms and it was difficult… [I was] looking for previous resources … to see what I had to do. Use, use them as, use them as models for me... I had <u>to</u>, to subscribe, to platforms and also to learn how to use the digital … the library"

Q10P1:"… sometimes my Internet connection, failed so I couldn't connect [to] her classes… I tried to send… things that I had written for her to check, but … she checks them but … [sometimes] I didn't get any response … sometimes the, the comments she made … were difficult for me to understand. like what, what she wanted for me to do… [so] what I did is that I, there was this article that I used for my first chapter and is similar to the study that I am performing so I … [try] do the same or similar"

Q10P4:"… the most challenged that I had was to understand the advices because … I don't really know many concepts or the whole concept of writing a thesis and sometimes I didn't understand what … she [my supervisor] wanted me to do…"

Q10P2:"…my strategy it was just to, to take it easy because I knew that his comments were strong… I tried to face that situation … to be focused on the things that he highlight during his comments …most of the thesis was like that."

Based on the answers, there seems to be a high level of misunderstanding towards the feedback that the professor gives to the participants. Students simply take the recommendations given by their thesis advisers and they try to modify their writing by themselves, even when they do not know how to do it. This could imply that they did not adequately acquire the necessary knowledge during their research methodology and research seminar I classes. Particularly, the ones regarding bibliographic research and academic writing. In addition, this could mean that during the consultancies, or meetings between the thesis supervisor and the student, the student does not comment on the problems of his/her thesis, much less make his/her opinion known about how to continue the project. This came to confirm the results obtained by Morfinez Cortez (2017) who measured the types of dialogues presented in a thesis supervision session and found that opinions about the project and its problems were rare in the sessions. In addition, results demonstrate students usually have a low research experience, they simply look for other models and try to imitate their style. This may cause students to not develop their voice in their projects and, as mentioned before, it may lead them to fall into an issue of plagiarism. For this reason, Tiwari (2019) considers that thesis supervisors "must encourage their students to read widely to enrich their knowledge about research and research methodology" (p. 51).

External factors have a great influence on the thesis development. They can boost or improve students' motivation to continue and submit their projects. For this reason, optimal guidance during and motivation by relatives, professors, and even friends may help significantly to students, to familiarize themselves with the thesis development. But there is another factor that also may have a considerable influence during this process due to it may facilitate the thesis development, the institutional factor.

4.3 Institutional Factors

Finally, Institutional factors are other critical thinking factors that directly influence the thesis writing process because they are closely related to the internal factors and some of the external factors. Indeed, the institution is in charge of giving both teachers and students the necessary tools for an optimal teaching-learning process in the classroom, as well as promoting the development of knowledge and establishing a research culture (Iqbal et al, 2018). One of the ways to promote this culture is through the development of academic writing, particularly the thesis. Therefore, many times the institution gives the possible support to its students so that they can easily obtain the bibliographic and methodological information to develop their theses so they can submit it to obtain the degree. All this support and motivation to develop the thesis may be provided to the student in different ways, as in example through the resources it provides, such as infrastructure, bibliographic wealth, courses, research programs, economical support, and of course qualified professors. Considering that, this dimension was divided into 2 categories: 1) the Institutional programs and resources are offered by the institution to both develop students' research abilities and facilitate information Access, and 2) the Institutional support aimed to help students to submit their thesis by mitigating academic challenges and motivating them to opt to choose this graduation modality.

4.3.1 Institutional support to help students to write a thesis

Question 11 was designed for this category. On this, the participants were asked about their knowledge and domain about the different academic resources and programs offered by the institution that they have used to develop their thesis and how these resources have helped them in this writing process. Participants' answers are written as they were expressed.

Q11P3:"...there is a book by this teacher of the faculty ... it's the book that we used to write our chapters, just that book."

Q11P5:"... [my thesis supervisor] recommend the ERIC: Educational Resources Information Center and also google academic, and different platforms. And ... platforms that are more related to our area of study and we can get many articles by free"

Q11P2:"...he provided us some websites to check, for example Google Scholar… And also… the virtual library actually, he gave us a clue to look for the material there."

Q11P4:"... different resources to get ,to gather information such as Google academic ... just websites to gather information from different ___ authors. And also… the "repositorio" from BUAP to gather information from thesis that are related to our career…"

Q11P1:"... last semester she gave us like a document where she included different web pages where we could find articles and books ___ ehh, she also invited some of her students to come into our class and give us or talked about their experience. Also ... webinars, that we could attend…"

Given the answers, there seems to be little knowledge of the institutional programs offered to help students to investigate and write their theses. Students only seem to know some of the research resources offered by the institution such as the virtual library and e-journals that have an agreement with the university to access its repository. Also, it can be noted that some teachers encourage their students to explore more information sources and different search engines to obtain academic and reliable information. At the same time, some professors even support their students with small

talks given by alumni who share their research experiences, enriching the students' perspective and giving them a better idea about how to conduct their research projects. All this support is highly effective as considered by Han (2014, as cited in Erbay Çetinkaya & Yilmaz 2017) who mentions that professor's guidance in students' thesis writing could enhance their abilities. However, providing students with bibliographic research tools is not enough, according to Tiwari (2019) professors also should help them to locate the required literature by encouraging their students to read widely. In other words, knowing about the existence of investigational resources is only the first step, it is also necessary for the student to know how to use them and properly read the texts found on it in order to enrich their thesis and not only copy ideas from other authors - what could be considered plagiarism as well.

4.3.2 Elements to motivate students to submit the thesis

Finally, the last question was dedicated to knowing the student's feelings, beliefs, and opinions about what kind of Institutional support they think would be supportive to implement to help them to develop and submit their thesis. Most relevant parts of the answers are displayed as they were expressed.

> *Q12P1:"…I would say that the problem is that ___ teachers don't challenge students enough … probably they will have to be stricter. And since the very beginning … give or offer workshop to write, academic, academic articles or academic writings because we really don't know much about it."*

> *Q12P2:"I think they must give us like a model or a neutral model or at least because most of teacher work as they want or as they, as their perception is… the second thing is to provide material or even more material because some-, sometimes we don't have the material at the library… [or] we don't have the key to download the resources…*

[Also] more time to develop strategy, strategies and abilities to face some situations during the process of thesis… I guess we, eh, the institution must provide more subjects regarding thesis or seminary."

Q12P3:"… trying to implement that the students write more things, more text... And also… this subject, methodology, [give it] … the importance…"

Q12P4:" I think we should start earlier to, eh, not writing but thinking about the topic we are gonna write about… I think they [Professors] should promote start thinking about your topic earlier than just the last two semesters… [also] implement, extracurricular courses … I think implementing another class other course which goes before the last courses that focus on specific writing…"

Q12P5:"…it would be great to have like extra courses to learn some things that we could not have learned in the previous courses or to solve some doubts, even if we have like thesis director and the teacher from the seminar, I think it'll be good … to have a course to learn how to analyze all the data that we collect in the, with the instrument we apply."

Based on the answers, there is a high calling for more practice and academic support, particularly for extra courses dedicated to academic writing and research. Students feel that they are not fully prepared to carry out research such as the thesis when taking the research methodology and research seminar classes. Among the most requested support to the institution is the provision of more practice to write academic texts, greater demand in the quality of the writings, and a model to follow in the writing of thesis within the LEI program. However, some of these demands are already offered by the faculty and government institutions through workshops, research programs,

and even scholarships for students who submit their thesis. This comes to emphasize the results of the previous question because, as can be seen, the students are unaware of many programs offered by the university to support them in academic research training. Furthermore, this clamor for more academic writing practice and courses confirms what Hassan Al Badi (2015) and Thabran & Fajaryani (2017) mention by agreeing that lack of background knowledge about the conventions of academic writing and a low preparation to conduct research and write a thesis are the main challenges students face in this stage.

Analyzing the responses of the participants, it can be observed broadly that many of them feel that they do not have enough capacity to develop such extensive writing and also in a foreign language. Among the most recurrent responses, it could be observed that they feel frustrated because they do not have the level of language necessary to read, understand and write the ideas necessary for the development of their thesis. This feeling of frustration is accompanied by insecurity as students are unaware of the strategies and conventions used in this type of academic writing. For this, the students consider that more practice is necessary, especially in what refers to the writing of academic texts, either by implementing extra courses focused on the analysis and development of academic research writings, as well as more support for the realization of these, for example, more bibliographic resources and guidance in the realization of these. However, many of the challenges mentioned by the students are rooted in other aspects, both internal and external, which, although they may not be the responsibility of the institution, knowing them could develop better techniques to mitigate some of the challenges that the student faces. at this stage and thus improve the quality and quantity of theses presented by students as a degree method. It is for this reason that this study also decided to do a thematic analysis to know the behavior and linkage of these critical thinking factors.

4.4 Thematic analysis

Even knowing the beliefs and feelings of the participants related to the thesis development process is quite important to understand the challenges they face during this process, it is necessary to go further and understand how those aspects relate and interact with others, creating an interconnected pattern of themes. So, a triangulation of 3 dimensions of critical thinking factors that influence the thesis development process was done by using ATLAS.ti. As it was mentioned before, these three dimensions were divided into categories and each category was explained briefly based on its operational definition. Now, for the deductive coding process codes were obtained based on the operational definitions and literature review, as a result, 106 codes were obtained to code the interviews (see appendix III for the chart of codes and their definitions). These codes were grouped into their categories and related between them to find the central category. This deductive coding process allowed us to know how the institutional and external factors relate to the internal factors by provoking them and supporting them. The map with the code networks obtained in ATLAS.ti is presented below for explanation (see appendix V for a bigger image). It can be seen how all the elements converge with each other and interact with factors of other dimensions, creating a relationship between codes that allows us to identify how these are the cause or effect of others.

Figure 4.1

Codes network
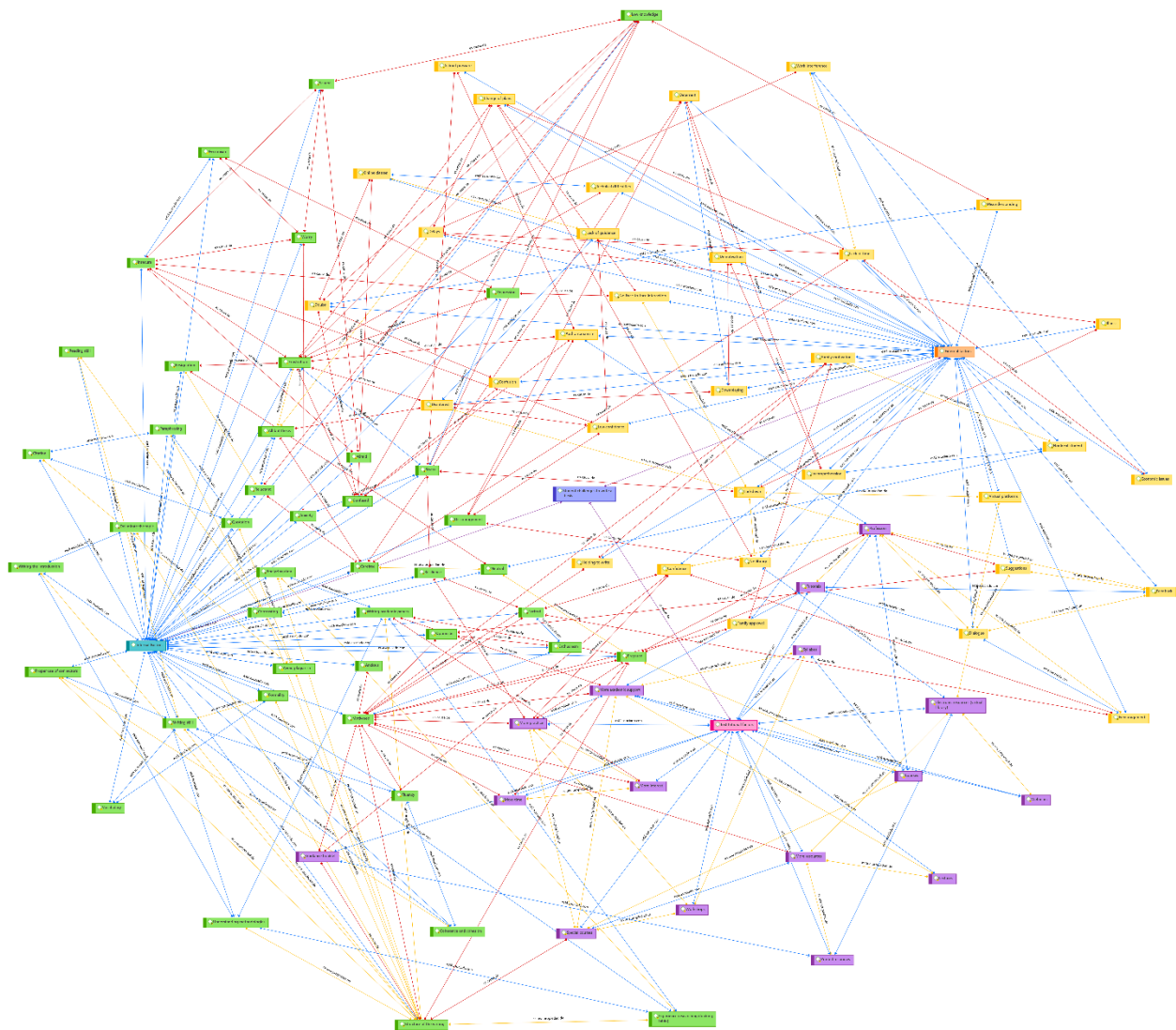
4.4.1 Internal Factors

Understanding the relationship between personal factors and the thesis writing process is essential to understand the thesis writing engagement, its development, and production. Regarding the internal factors, the content analysis revealed that students' academic knowledge and attitude play an important role in the thesis development. However, the causes of these issues go beyond a simple way of thinking or acting on the part of the student. According to the code network, we can

see how the codes referring to the Research Background and English Language Proficiency are related to the positive aspects of the student's attitude towards writing a thesis category. That is the case of the code "Structure of the writing", which refers to the Knowledge of the proper writing structure of the thesis, which is linked to the different aspects that concern the writing of academic texts such as knowledge of methodologies, research of bibliography and analysis of data. As Lestari (2020), Thabran & Fajaryani (2017), and Tiwari (2019) mentioned, the poor or even lack of research knowledge background of the students is one of the biggest issues students face when trying to develop huge and important research as the thesis is, so it is comprehensible that students who have this knowledge feel prepared to complete the thesis. For this reason, the Structure of the writing code is linked to the Preparation code, showing that a better understanding of the academic writing process may lead students to feel prepared to write not only the thesis but also other kinds of academic papers. Similarly, the codes that concern the category of English language proficiency are linked to various codes of the category of Research background, especially those that concern formality, knowledge of vocabulary, and various knowledge that is linked to writing skills. These codes are linked in "writing skill" which is defined as the proficiency of expressing in a written way and, at the same time, this code is also linked to "structure of the writing" due to, according to Abdulkareem (2013, as cited in Hassan Al Badi, 2015) a proper study of academic words, phrases, and grammar may play an essential role in producing pieces of writing. In turn, this code is linked to "motivation", since it can be observed that, by knowing and having experience about the academic research processes, the student feels motivated to be able to carry out their thesis, demonstrating that the Crosby's (2009, as cited in Hassan Al Badi, 2015) and Gordon (2008, as cited in Hassan Al Badi, 2015) suggestions about enriching students lexicon with academic vocabulary and expressions as well as introducing them to academic writing strategies and how to

develop ideas may be a valuable strategy to improve their academic writing and hence motivate them to succeed in this task. In other words, if the student has a good level of English language proficiency, he/she will therefore have good writing skills that will facilitate the writing of academic papers in English, such as the thesis to graduate from LEI. Nevertheless, not only a positive attitude leads to the solution of the problem, motivation is a joint action between different factors such as family support, teacher guidance, and access to necessary tools that facilitate this arduous work. For this reason, the Motivation code is one of the key concepts that link internal, external, and intuitional factors.

On the other hand, there seems to be a relationship between the negative attitudes of students and various psychological issues. Many of the codes referring to the category of "Student's attitude towards writing a thesis" lead to the formation and intensification of aspects related to the codes of the category of "Psychological issues". As can be seen, students who begin to write their theses commonly feel insecure, confused, pessimistic, afraid, and with a low knowledge regarding the thesis writing process. Confirming Lestari's (2020) idea about the anxiety that this process implies for students, especially when they feel they don't have enough English level to express clearly their ideas in the paper, so the reason these issues are on an opposite side of the motivation code. Besides, if these attitudes are usually accompanied by frustration, guilt, and irresponsibility, these attitudes may lead to an All-But-Thesis (Abreu, 2015), which could lead the student to drop the process, or in severe cases, to stress and depression. Indeed, all these negative feelings could lead the student to psychological issues such as stress, worry, and depression, which seem to be linked to a deep feeling of frustration about doing their thesis.

However, these feelings do not always lead to a negative ending, as can be seen in the code network, some students show a resilient attitude to the challenges of developing a thesis. Here the

external support from the institution and teachers play an important role because, based on this support, the student can overcome some difficulties that he/she may have concerned the preparation of the thesis and thus change his / her negative perspective to a positive one which allows them to conclude their writing. Equally important, motivation and time management play an important role during the process. Lestari (2020) and Thabran and Fajaryani (2017) found that time management plays a crucial role in success in completing the thesis on time; moreover, the motivation of professors, family, friends, and institutions also has a positive impact to mitigate the effects of this condition, which means that this code is linked to external and institutional factors like the practice classes and qualified professors.

4.4.2 External Factors

Just like the internal factors, external factors have an equal or even stronger influence on the thesis writing than the first ones. Content analysis revealed that the relationship of the thesis supervisor plays an important role in the development of the thesis; however, a great influence of the category of "unforeseen situations" and a little of "family influence" can be observed too. This influence can make the student drastically improve his attitude regarding the writing of the thesis or what may lead to a state of frustration. As can be noticed in the code network, the first category, the Family influence, trends to a positive influence on the thesis writing process. To point this out the "Family motivation" code, which refers to the Family cheering to motivate the student to complete the thesis, is closely related to the Family approval towards the student's decision of writing a thesis, so it can be inferred that this motivation comes from the support of parents to see their children graduate. This finding agrees with the ideas of Dominguez (2012) who identified that family support may enhance the students 'opportunities for completing the thesis by making them feel less isolated and having a commitment and belief in a successful future. However, the family

does not always have a positive influence. As an illustration, the First-Generation students state that they feel misunderstood since mainly the parents demerit the work they do in front of the computer to be able to research and write their thesis. In addition, the low relevance that parents give to the thesis when considering it simply as "another assignment" makes the students lose his/her enthusiasm for writing the thesis or even diminish its importance. In the same fashion, some students mentioned choose not to graduate through the professional exam modality, so they only develop their thesis to meet the requirements of the research seminar subjects. This decision is also, to some extent, supported by parents who understand their children's situation and reason for not submitting the thesis to graduate. These Attitudes and actions from the family that may deter a student from writing the thesis were classified within the code "Deterrent" because as their name indicates, these actions and/or attitudes disincentive the student to submit the thesis, so this code is linked with carefree and demotivation codes.

Similarly, the Thesis supervisor relationship has both a positive and negative effect on the development and conclusion of the thesis. In the content analysis, results demonstrated that thesis supervisors may generate that their supervisees develop their writing not only in a smooth way but also in a more arduous way due to their attitudes that could make students feel more pressured or frustrated which can lead to demotivating them from writing their thesis. As can be seen in the code network, the teachers -who are part of the institutional factors- interact with the students through the dialogue that takes place in the thesis revision. In these revisions, the professors make suggestions on how the student should prosecute, continue or solve problems related to the writing of the thesis. All these processes are captured in the Code Network, so the "Dialogue" code is related to the "Feedback" and "Suggestions" codes. These codes in turn are related to the "Encouragement" code that refers to Professor's words or behavior that give the students the

confidence to develop their thesis, thus we can infer that these accompanying activities in addition to the positive attitudes of the teacher can encourage the student to do their thesis and submit it to graduate from this modality. Agreeing with Tiwari (2019), student and thesis supervisor both should try to develop positive rapport, so a good relationship between them can trigger the student to feel prepared, excited, and optimistic to develop and conclude their thesis; however, there is not always a good relationship between teacher and student. As the participants of this study mentioned in their interviews, in some cases, they consider that their thesis seminar professors and thesis directors have demotivating attitudes that make them feel frustrated, confused, and even stressed. A clear example of this issue is the authoritarian code, which refers to the thesis supervisor's attitude that students must completely obey his commands for writing a thesis or limiting their writing freedom. According to the students, when the professor imposes his will, many times they feel that they lose their motivation and confidence to write their thesis, thus this code is related to the "Discouragement" code. In addition, this code is also closely related to the "Frustration" code, since according to the content analysis, the students manifested feeling a little bit angry and even lost their confidence for not being able to complete the thesis as they wanted. This result is similar to Tiwari's (2019) who showed that one of the main complaints students make is about the uncooperative behavior of supervisors, in this case, this behavior adds more school pressure for LEI students by making them feel confused with the instructions given by these teachers.

In the same fashion, another aspect that has generated a significant challenge for students, not only in the writing of their thesis, has been the outcomes derived from the COVID-19 Pandemic. These situations were classified within the dimension of "Unforeseen situations" and as can be seen in the code network, all the codes in this category are found in the negative aspects that influence the

thesis. Among the most mentioned effects by students are the fact of having to adapt their methodologies and bibliographic resources due to the lack of face-to-face interactions and closed libraries. All these aspects lead the student to Change the original idea of his / her thesis for another one suitable for the pandemic situation, which in turn generates delays in the delivery of their writings and leads to a state of frustration or, in the worst case, in an All-But-Thesis state.

Finally, the results of the Socio-economic status category were the ones that had the least impact on the development of the thesis. However, many of the codes in this category leaned towards a negative trend. Among the most mentioned codes are "Lack of time", "School pressure" and "Work interference" which, as seen in content analysis, cause the student not to have enough time to dedicate to writing their thesis. For that reason, the "School pressure" and "Work interference" codes are linked to the "Lack of time" code, which in turn is linked to the "Delays" code since these factors are the main causes that the student has no enough time to write his/her thesis, causing him/her to end up delaying his delivery of thesis advances with his/her thesis director or even having an impact on student's mental health by causing him/her a state of frustration and stress.

This agrees with the ideas of Thabran & Fajaryani (2017) who consider that these types of responsibilities are the ones that could negatively interfere in the thesis development process by decreasing the time spent on writing and researching, as well as generating extra stress to the students. Coupled with this, one of the factors considered in this category was Economic issues; however, we see in the code network that this code is only related to lack of time and work interferences, since on many occasions students must work or do other activities to obtain money and thus solve other economic expenses (Dominguez, 2012; Tiwari, 2019).

Generally speaking, external factors are largely triggers or intensifiers of internal factors that can make the student feel motivated to continue -and even finish- their thesis, or on the contrary they

can be the cause of fatigue and stress due to not being able to develop the thesis properly. Although the most outstanding external factors were exposed here; the courses, academic body, and institutional research support were not considered since they were grouped in a third dimension: Institutional factors.

4.4.3 Institutional Factors

Many times, the institution provides all the support to its students so that they can easily obtain the bibliographic and methodological information to develop their thesis and present them to obtain the title. For this reason, the two categories of this dimension positively influence the writing of the thesis. Regarding the category of Institutional support to help, as external factors are oriented to the development of the skills and motivation of students, its codes are closer to the dimension of external factors since many of them are programs and resources offered by the institution to develop student's research skills and facilitate access to information. Much of this motivation comes from professors since it is the professor who gives "tutorials" and "courses", for this reason, these codes of the dimension of institutional factors are directly linked to the "Professor" code which in this dimension it refers to all the professors -not necessarily just the thesis supervisor- who academically interact with the student. These codes are the basis of the Thesis supervisor relationship category so there are different links between these three codes to different codes of the External factors dimension. For example, the "feedback", "suggestions" and "dialogue" codes are the closest ones to the "professor" code since it is the professors who, through dialogic interactions, provide to their students with information, opinions, ideas, and comments that may help the student to complete their thesis. In the same fashion, the code network shows us that the professor is a generator of confidence because, as Dominguez (2012) considers, through his / her teaching skills professors could make the students feel comfortable and make them trust in him/her

in the process of writing their thesis. Something to point out here is that the professors can also make the student feel prepared to face the challenge of writing their thesis so this not only confirms that the teacher is the one who, through a good teaching process, makes the student could have the necessary knowledge to properly write their thesis as well as the strategies to carry out good bibliographic research, but also shows that this code relates to both internal and external factors. However, not everything is perfect with this code, as seen in external factors, sometimes the negative attitudes of thesis advisors negatively affect the attitudes and motivation of the student and therefore in the development of the thesis (Tiwari, 2019). The same happens with the rest of the professors, that is why this code is related to the codes "Authoritarianism" and "disinterest" too because even in other subjects that are not directly related to the writing of the thesis, the professors also request that students must obey completely his commands for their assignments as well as they sometimes have a low interest in the thesis development process of their students (Tiwari, 2019). These attitudes are what ultimately lead to a state of All-But-Thesis, so attention must be paid to these factors in order to mitigate their negative effects.

Similarly, other codes to highlight are those related to the access of information and bibliographic information, in particular, the codes "Electronic resources (virtual library)", "Workshops", and "Printed resources". These codes are both related to each other and various codes in the category of Elements to motivate students to submit the thesis, hence it can be inferred that the support provided by the institution can trigger a motivation to carry out the thesis and therefore submit it (Carlino, 2005; Merino Solari, 2019). At the same time, the code network shows how the "More Academic Support" code is the product of a good syllabus, tutorials, and special courses for the writing and production of academic papers such as the thesis. In turn, this code can cause the student to feel motivated to complete their thesis. This finding could mean that the more support

students receive to write their thesis, the greater the interest in dedicating themselves to writing and submitting the thesis. Of course, support of the institution is essential to wake up the interest of students in conducting research but it is not an exclusive work of the institution, as Erbay Çetinkaya & Yilmaz (2017) mention, students should also raise awareness of the importance of thesis writing along with institution, administrators, and teachers.

In the same way, the codes referring to the necessity of more practice in developing academic papers, bibliographic resources, and interest by both students and thesis supervisors for the thesis development are the ones that are the most linked codes with internal factors since these codes, like the previous one, act as intermediaries between the codes of the category "Institutional support to help students to write a thesis" and the "Student's attitude towards writing a thesis", category belonging to the dimension of internal factors. As can be seen in the code network, these codes are the ones that are related to the "motivation" code, so this finding may mean that all the institutional support, early practice for the writing of academic writings, and accessible availability of bibliographic material are key triggers to generate that the students feel interested in doing their thesis (Tiwari, 2019).

On the other hand, other codes that are worth highlighting are the "More time" and "Guidance booklet" codes, in as much as these codes refer to the demand of students for having more time to develop their thesis and the request for a model or guide to follow for thesis writing, respectively. Like the other codes mentioned, these two ones are also linked to the motivation code so this could mean students would improve their desire to complete the thesis if they were given more time to develop it instead of putting pressure on them at the end of the degree. Similarly, a constant that students request is the creation of a guide or standard to follow their thesis, this because the LEI does not have a model to follow for the writing of the thesis, since the different disciplines it has

in its curricular plan does not allow a single model to be used to write the thesis, not to mention that sometimes professors are the ones who decide the writing style students should follow depending on their experience writing style of the school they studied: American or British.

Generally speaking, the three dimensions studied here converge with each other causing both a positive and negative influence, since these factors can make students feel motivated to do their thesis or, on the other hand, make students feel frustrated by the load academic and pressure generated by all the aspects that its development implies. Thanks to this thematic analysis, it was possible to create this code network where it can be observed how various critical factors are triggers for other factors that in turn are linked to each other in order to reach the main factors that influence the development of the thesis.

Chapter V – Conclusions

This is the last chapter of the research, and it presents the conclusion of the study. This chapter provides overview of the study as well as it explains the findings of the study. Also, it answers the research questions proposed at the beginning of the research. Finally, it shows the research limitations, possibilities, and suggestions for further research.

5.1 Research Context

Research is an important process we develop during our whole life, but it is until university when we started to generate this research as a disclosure method. As for many students, the thesis is their first approach to academic writing, they face many challenges when writing it, so this thesis had the intention of finding out why students face challenges to engage with a thesis development.

For this purpose, analyzing the factors that influence students' decision to elaborate a thesis as a graduation modality in the LEI program at Facultad de Lenguas, BUAP through critical thinking was considered. Based on this, we go beyond the obvious and explore the challenges students face when writing academic research to distinguish factors that contribute to the students' performance in conducting their thesis writing. Through a qualitative approach, a cross-sectional study was designed where the opinions and beliefs of the students about the challenges they face when writing a thesis were collected. Their answers were concentrated and analyzed using the ATLAS.ti software to finally be explained using both content analysis and a thematic analysis. The results helped to understand how students 'engagement can be boosted to develop a thesis at LEI-BUAP

5.2 Conclusions

Critical factors that impact the development of the thesis were divided into three dimensions: internal factors, external factors, and institutional factors. These three dimensions were analyzed

using content analysis as thematic analysis. First, the results of content analysis of the first category revealed that despite the help provided by classes focused on academic research in LEI, many of the students show a lack of interest in looking for extra resources and support to develop academic papers. In addition, there seems not to be enough academic resources, which causes students to be guided by the books and anthologies provided by their professors, in addition to causing students to base their thesis on theses written by students from previous generations. In addition, some students also consider that they do not have the necessary English language level to write an academic paper in a foreign language due to they are still not familiarized with the conventions used for writing academic texts such as the thesis and, of course, with the proper vocabulary to develop it. All these aspects not only may lead students to misunderstand what the theory presents but also may cause them some psychological issues. Of course, the lack of academic preparation is only one part, the student's attitudes towards developing a thesis also influence this process. If a student has a pessimistic perception towards developing the thesis, this attitude is often maintained during the methodology and research seminar, so this attitude ends up developing a feeling of anxiety, frustration, and discouragement. On the contrary, if a student has an optimistic attitude, or develops it during classes, then it is more likely that he will feel motivated not only to finish his thesis but also to transfer this knowledge in research and apply it in other subjects and projects.

Concerning the external factors dimension, the categories that most influence the development of the thesis are the unforeseen situation and the thesis supervisor relationship. Starting with the latter one, this category can influence both positively and negatively depending on the attitude of the thesis advisor. Although the development of the thesis is not the responsibility of the thesis supervisor, the professor's attitudes do impact the student's feelings regarding his progress, especially when making corrections and suggestions to the student on how to continue his thesis.

An authoritative and disinterested attitude of the professor may cause the student to be careless about submitting his / her thesis and to carry out this academic activity only to cover the requirements of the Research Seminar subjects; on the other hand, if the teacher provides good feedback and makes the student feel confident about her progress, this could make the student feel motivated to continue and finish their thesis. Moreover, another external challenge that, unsurprisingly, affects the development of the thesis in a very negative way is the unforeseen situations. Among the challenges generated, especially by confinement due to the pandemic of COVID-19, were the fact of having to adapt classes and projects to virtual platforms or in a remote model. These issues also affected the development of the thesis since the students had to use exclusively virtual platforms to obtain bibliographic information and to apply their research instruments, generating delays and even inaccurate obtaining of data. Finally, the factors that had the least impact on this dimension were those relating to the family and the socio-economic aspect. These only have a slight impact on student motivation and time management, so they sometimes go unnoticed, but when they do, they particularly affect the motivation or time management of the students.

Finally, the content analysis of the dimension of external factors revealed that the students know little about the programs offered to help them to investigate and write their theses. Although many times the professors of various subjects encourage their students to explore more information sources and different search engines to obtain academic and reliable information, students still request more practice and academic support, particularly for extra courses dedicated to academic writing and research.

In the case of thematic analysis, it can be observed that these three dimensions interact with each other, generating or relating to various factors of their own or other dimensions. This relationship

is presented in the code network developed with the help of the ATLAS.ti software, here we can observe how these three dimensions are grouped in a similar way to a Venn diagram, however, the analysis of their relationships is a bit different. First of all, we can see how the internal factors are grouped into two themes that correspond to the motivation to continue and finish the thesis, and the frustration of not being able to carry out the thesis on time. For this reason, the whole code network can be divided in half by grouping the factors that influence negatively in the upper part, and the factors that influence positively in the lower part. For this reason, codes from other categories end up being linked to one or both of these two codes, since they can positively or negatively affect the student's development of the thesis.

Figure 5.1

Positive influence of critical thinking factors

symbology	
A	esta asociado con
C	es causa de
P	es una propiedad de
E	es parte de
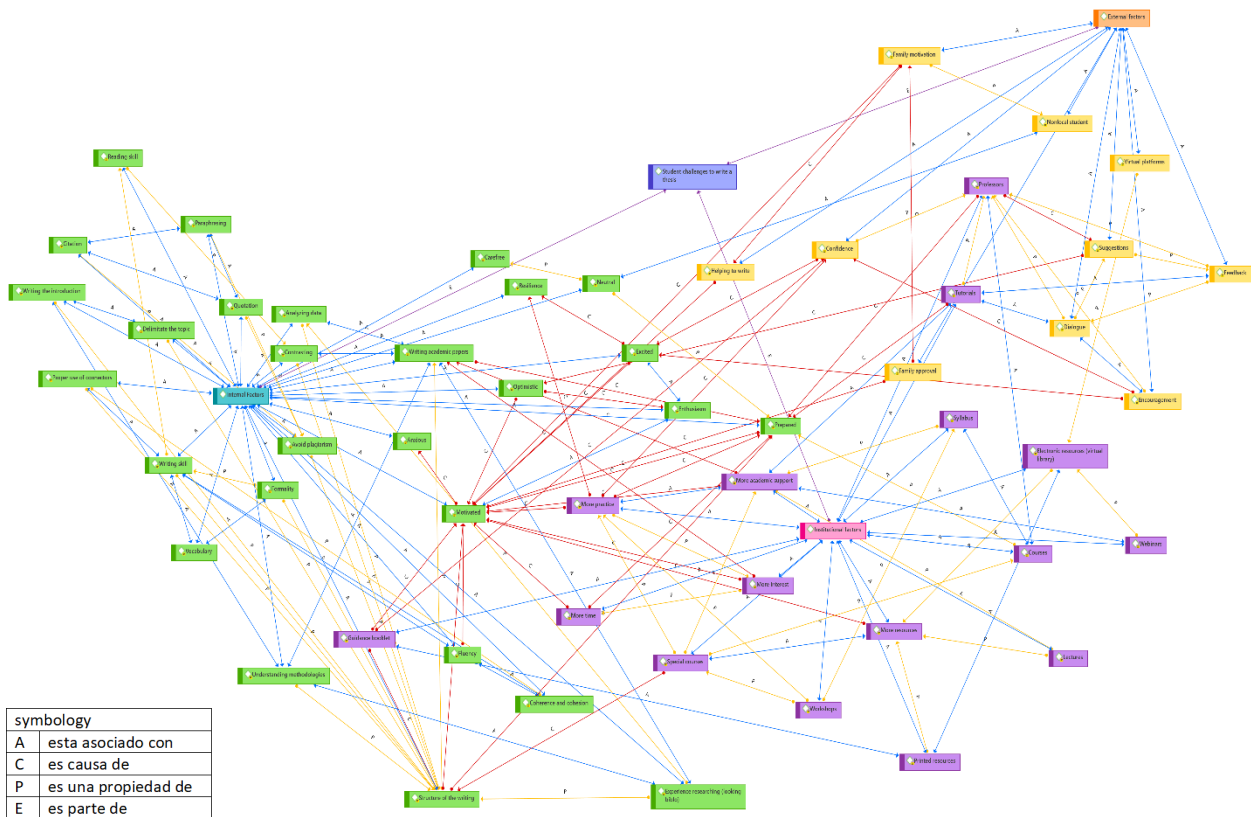
Figure 5.2

Negative influence of critical thinking factors
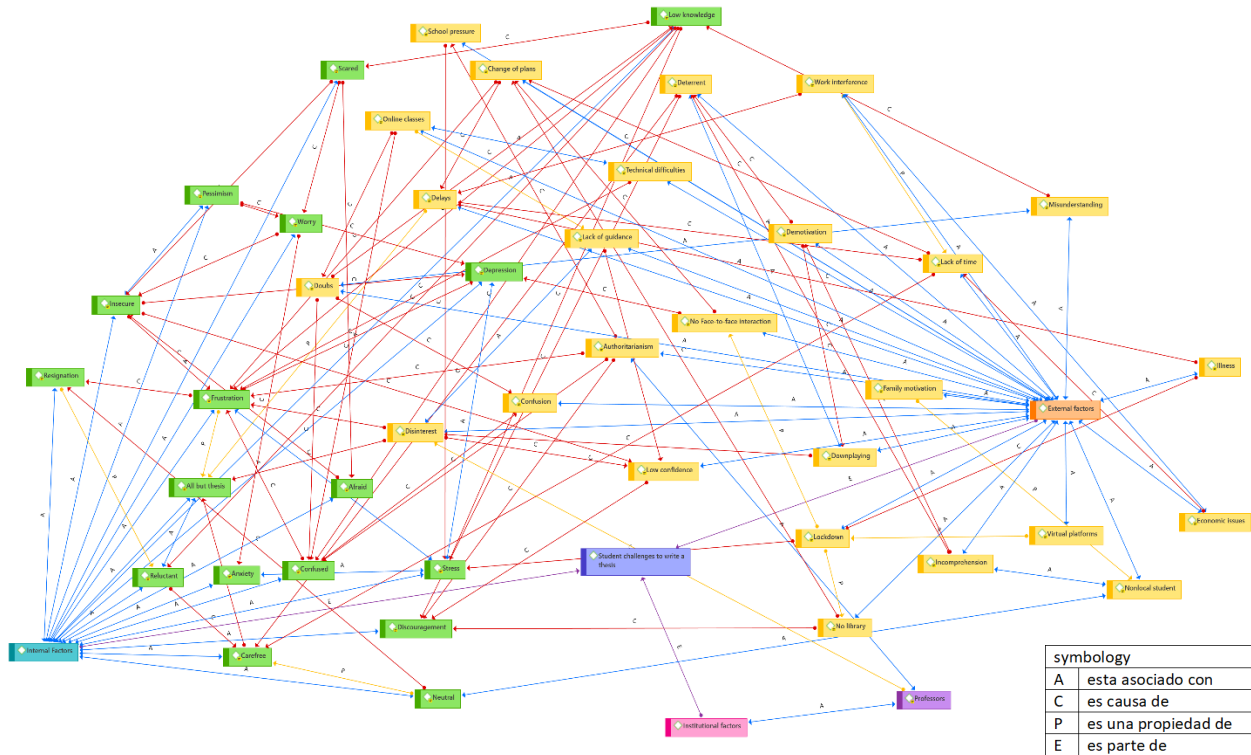
Continuing with the relations of the codes of the dimension of external factors, these are also divided between the factors that influence positively and the ones that negatively affect the development of the thesis. Starting with the category of "Family influence", this one tends more to generate a positive impact on the student's motivation, since many times the family cheer the student to continue developing the thesis, however, in certain cases the family's misunderstanding of the research process and thesis writing causes deterrent attitudes when demeriting this academic work. Then, the category of socio-economic status seems to be the one that least affects students, since the students who reported having an issue in this area were related to time management due to the workload that makes it difficult for them to focus on their thesis, thus this category tends more to a negative influence for the development of the thesis. After that, the third category of this

dimension, the unforeseen situations, is the one that most negatively influences the development of the thesis, particularly due to all the challenges generated by the covid-19 pandemic. For this reason, many of the codes in this category are related to the codes of the categories of psychological issues, category of the dimension of internal factors, particularly those ones that lead to frustration like stress, confusion, and depression codes. At last, the Thesis supervisor relationship category is the one that presents both influences in its codes depending on the type of relationship that the student has with his supervisor thesis. On one hand, if the professors carry out a good thesis follow-up and feedback to their students, this will generate confidence and therefore this could motivate them to finish their thesis. On the other hand, if the thesis supervisor tends to impose his/her ideas of how the student should develop the thesis, or if there is a lack of review and feedback from the professor, then all this could provoke student not only to become disinterested and frustrated about continuing his/her project but also falling in an All-But-Thesis condition, too.

Finally, almost all of the codes of the dimension of institutional factors tend to have a positive influence because they are programs and supports offered by institutions to motivate the engagement, development, and submission of the thesis. Practically all these supports and materials that the institution offers are linked to the increase in practice to develop academic texts and to the "professor" code that, similar to the thesis supervisor, can affect the development of the thesis depending on their attitude. In addition, the student's request for more time, interest on the part of their professors, and materials to develop their thesis, also have an impact on motivation, so these requests can be taken into account to encourage the submission of thesis in LEI.

5.3 Research questions

At the beginning of this thesis, the following research questions were posed, for which responses of these questions are presented follow.

RQ1. How do critical thinking factors influence students' decision to elaborate a thesis as a graduation modality in the LEI program at Facultad de Lenguas, BUAP?

Broadly speaking, the factors analyzed in this thesis showed that they influence both positively and negatively. On one hand, the factors that allow the student to develop academically are the ones that most affect the student's confidence and preparation, allowing them to get more committed to the thesis writing. Similarly, the motivation and academic support received from friends, family, and especially from their professors is a determining factor for the student that is deciding to prepare their thesis to present it as a graduation modality.

However, factors such as work, academic pressure from other subjects, lack of guidance and support for the thesis writing, and, above all, the authoritarian attitudes of the thesis supervisor are the ones that most negatively impact students who wish to carry out their thesis as graduation modality. In addition, the perception and attitudes that the students have regarding starting develop their thesis also influence too many times. If the student has a pessimistic or carefree attitude about the thesis writing, it would be more likely that he just does it as a requirement to pass the research methodology subjects.

RQ2. What critical thinking factors contribute to the students' performance in conducting academic research?

Generally speaking, the factors that impact the most on the development of the thesis are those ones that have to do with external and institutional factors, in particular, those factors that allow the student to have a proper academic development such as institutional support programs, academic writing workshops, diversity and access to bibliographic materials, and especially the academic relationship with his thesis supervisor. As an illustration, the professor factor can make the students feel interested and attracted to the research through his feedback, opinions, and

experience. For this reason, the professor is a factor that could encourage the students to continue their thesis, causing them to feel more excited to complete the thesis. In the same way, the support from institutional programs that help students to easily gather bibliographic information and to improve their writing skills and language proficiency also contribute to motivating students to continue writing their thesis.

However, the professor can also generate the opposite effect when he/she is not interested in the student's thesis or does not give him/her the proper feedback and guidance during the development of it. These negative attitudes could make the student feel frustrated and even they could trigger an All-But-Thesis condition on the student.

Similarly, another factor that impacted negatively so much on these generations was the confinement by COVID-19. All the issues generated from moving the studies and research to digital media caused great confusion in the students and professors because they had to modify their classes and projects, provoking some difficulties in obtaining data and information for their projects. Moreover, in the voice of the students, the interaction with their thesis supervisors was not the same during the pandemic as it was more difficult for the students to locate them and ask for their help than it was in face-to-face interaction. In fact, these aspects had a hard impact on the students' mood, frustrating them to continue their thesis and, even some of them cannot be controlled, their impact on the students' academic performance could be mitigated by properly guiding and listening to the students' needs.

RQ3. How can students' engagement be boosted to develop a thesis at LEI-BUAP?

As it has been noted, external and institutional factors are the ones that have a more positive impact on the thesis development. Having good support from professors, the thesis supervisor, and, of course, the institution, can make this academic work easier for students and therefore engagement

for them would be more. Additionally, listening to the requests of the students could be very useful as many of them ask for more academic support, time to develop their writing, and, above all, practice in the writing of academic texts in order to have a better quality of their papers.

Equally important, it is necessary to reverse the negative attitudes of both teachers and students that only lead to hinder the development of theses. In the first place, we must stop seeing the thesis as a tedious process that students must carry out to accredit a subject. Second, professors must encourage the writing of a thesis as a graduation modality as well as support their supervisees by guiding them to excite an interest in research culture instead of just establishing the forms and methods that they would prefer the student uses in his/her thesis. And finally, a common request that the students make is to provide them with more time to carry out their writings and the creation of a guide or model to follow for the thesis of the LEI.

Altogether, what the students require of more time to be able to practice and write their thesis, besides the institutional support is always welcome to boost to develop a thesis. But, the most important thing is to mitigate the factors that trigger personal issues that affect the continuation of thesis writing.

5.4 Implications

This thesis addressed the challenges that affect engagement with a thesis development at LEI-BUAP by using the intelligence to effectively arrive at the most reasonable and justified position on this issue by analyzing results and situations of the subject. Even though there have been many investigations about the issues that affect the students who develop their thesis, it has not been approached from a critical thinking perspective as this thesis did. This allowed identifying those challenges students face when writing their theses and that may affect their submission and divide them into three categories. Thanks to this analysis, it was possible to know the factors that

influence the engagement, development, and submission of the thesis as a graduation modality, as well as how these factors are interrelated to trigger and boost other factors in different dimensions.

Henceforth, it is known that the three dimensions of critical thinking challenges(internal, external, and institutional) that affect the engagement with a thesis development are not isolated factors, but rather an interactive and interrelated process where they are linked among them, causing both a positive and negative impact on the student who is writing his thesis. Just as (Lestari, 2020) found out, this study revealed that much of this influence falls on the student's attitude, but now we know that it falls mainly on the motivation to continue developing the thesis and the frustration for not being able to continue doing the thesis as the student wishes

Likewise, as internal, external, and institutional factors are interrelated dimensions, it gives an idea of why some policies that seek to attack the problems that students present when they write their theses are ineffective. On the positive side, we can see how the categories that influence in a positive way are the ones referring to the practice in writing academic texts and the Institutional support to help students to write their thesis. On the negative side, Socioeconomic status and the Unforeseen situations are the categories that have the most negatively impact on the development of the thesis. Another key point is the categories of the thesis supervisor, Family influence, and Student's attitude towards writing a thesis that are categories that influence both positively and negatively, so these categories are the ones that should be paid more attention to avoid leaning more towards a negative trend. In brief, this research showed how the categories of the 3 dimensions described above influence differently in the thesis development in order to serve as a basis for better policies that mitigate the effects of negative triggers and boost the positive ones.

5.5 Limitations

Although this study addressed the challenges faced by students in a deeper way based on critical thinking, it must be accepted that this study has some limitations. Since this thesis used a cross-sectional study, it was not possible to contemplate all the factors that could have affected a time before the established period. In addition, the results obtained from the interviews were analyzed using a purely qualitative approach, leaving aside the analysis of the numerical variables that could have emerged from the instrument used. In the same way, this study used a case study that, although it allows the study of the particularity and complexity of a single case (Stake, 1995, p. xi), it is difficult to get a general scenario or a structural explanation for this microcosm; moreover, it only allows to address partial aspects of social reality that must be completed with other units. Furthermore, it should be noted that this study focused exclusively on knowing the ideas and beliefs of the students of the LEI about the challenges they faced when developing their thesis, leaving aside the opinions of teachers, educational authorities, and others directly involved in the development of a thesis.

Finally, it must be admitted that the greatest limitation of this study was the low number of participants in this study due to factors such as the time to carry out this study, the availability of the students, and, above all, the lack of face-to-face interaction due to the pandemic.

5.6 Directions for further research

This study has contributed by giving the notion of the factors that most positively and negatively influence the thesis development at LEI – BUAP; however, it would be of great interest to continue this study by analyzing in-depth the dimensions described in this study, as well as expanding the categories and codes through the analysis of different data collection techniques and instruments. In the same way, the numerical data obtained from the coding can provide a different perspective,

that is the reason why a quantitative analysis is suggested to complement the analysis done in this thesis.

Even though the critical thinking theory helped to go beyond the obvious and explore the challenges students face when writing their theses as well as to take a position about this issue and act by giving suggestions to engage with thesis development, it is recommended to apply an autonomous learning vision to see the process of how the student take charge of his / her learning and the responsibility for all the decisions concerning all aspects of the thesis development process.

Finally, it is recommended to replicate this study in other undergraduate and even graduate degrees, not only from the language faculty at BUAP but also from other careers and areas of study in order to have a better idea of the challenges faced by other students. Moreover, it is also suggested to analyze the challenges to engage with a thesis development through the vision of more and different actors who participate directly and indirectly in the development of the thesis

References

Abreu, J. L. (2015). Síndrome Todo Menos Tesis (TMT). *Daena: International Journal of Good Conscience*, *10*(2), 46–259.

Academia Mexicana de la Lengua. (2010). *Diccionario de mexicanismos*. SIGLO XXI Editores.

Alfaki, I. M. (2015). University students' English writing problems: Diagnosis and remedy. *International Journal of English Language Teaching*, *3*(3), 40–52.

APA. (2013, June 10). *Socioeconomic status: American Psychological Association*. American Psychological Association. Retrieved November 8, 2020, from https://www.apa.org/topics/socioeconomic-status

Australian National Univiersity. (2016, February 10). *The thesis: Current Studies*. https://www.anu.edu.au/students/program-administration/assessments-exams/the-thesis

Bhandari, P. (2020, June 19). *An introduction to qualitative research*. Scribbr. https://www.scribbr.com/methodology/qualitative-research/

Bierman, A. K., & Assali, R. N. (1996). *The Critical Thinking Handbook*. Prentice Hall.

BUAP. (2015, November). *Reglamento General de Titulación de la Benemérita Universidad Autónoma de Puebla*. Gaceta Universidad BUAP. Retrieved November 5, 2020, from https://repositorio.buap.mx/rcontraloria/public/inf_public/2019/0/reglamento_general_de_titulacion_de_la_buap.pdf

BUAP. (2020a). *Anuario Estadistico 2019–2020*. BUAP.

BUAP. (2020b, June). *Exámenes Profesionales en línea; procedimiento institucional: Titulación BUAP*. Benemérita Universidad Autónoma de Puebla. Retrieved November 9, 2020, from

https://admin.arpa.buap.mx/titulacion/wp-content/uploads/sites/2/2020/07/BUAP-Examen-Profesional-en-linea.pdf

BUAP. (2020c, June 14). *Guía Bibliotecas: BUAP*. Bibliotecas BUAP. Retrieved November 12, 2020, from https://bibliotecas.buap.mx/portal/public/guia_bibliotecas/GUIABIBLIOTECAS.pdf?fbclid =IwAR0TxaocKIymNZ-HC93F5B74sGE0fid2EQ6SwSdB5C46JQk0bzP5XOSjwFs

BUAP. (2020d, June 24). *Misión: BUAP*. Benemérita Universidad Autónoma de Puebla. https://www.buap.mx/content/misi%C3%B3n

Buckley, J. W. (1976). *Research Methodology and Business Decisions*. Inst of Management Accountants.

Cambridge University Press. (2020a). Research. In *Cambridge Dictionary*. https://dictionary.cambridge.org/es-LA/dictionary/english/research

Cambridge University Press. (2020b). Thesis. In *Cambridge Dictionary*. https://dictionary.cambridge.org/es/diccionario/ingles/thesis?q=Thesis

Cambridge University Press. (2021). Frustration. In *Cambridge Dictionary*. https://dictionary.cambridge.org/es/diccionario/ingles/frustration

Camps Mundó, A., & Castelló Badia, M. (2013). La escritura académica en la universidad. *REDU. Revista de Docencia Universitaria*, *11*(1), 17–36. https://doi.org/10.4995/redu.2013.5590

Carlino, P. (2005). La experiencia de escribir una tesis: contextos que la vuelven más difícil. *Anales Del Instituto de Lingüística*, *24*, 41–62.

Coordinación Nacional de Becas para el Bienestar Benito Juárez. (2019, December 24). *Becas Elisa Acuña*. Retrieved November 13, 2020, from https://www.gob.mx/becasbenitojuarez/articulos/becas-elisa-acuna

Creswell, J. W. (2013). *Qualitative Inquiry and Research Design*. SAGE Publications.

Creswell, J. W. (2014a). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package* (5th ed.). Pearson.

Creswell, J. W. (2014b). *Research Design*. SAGE Publications.

Criollo, R. (2005). *The Ultimate Guide To Writing A Thesis In TESOL/AL*. ACD.

Daen, A. (2021, February 3). *¿Cuántos se titulan en la UNAM? ¿Son más hombres o mujeres? ¿Aún hacen tesis? Aquí los datos*. Animal Político. https://www.animalpolitico.com/2019/06/unam-tesis-titulacion-hombres-mujeres-carreras/

Damián Casas, L. O., Ordóñez Briceño, D., & Molinari Palomino, G. (2004). *Guía para el desarrollo de capacidades*. Ministerio De Educación del Perú.

de la Cruz Villegas, V., Aquino Zúñiga, S. P., & López Hernández, R. E. (2021, February 15–18). *Sesión 1. Ontología y epistemología de la Investigación cualitativa y el ATLAS.ti* [CURSO TALLER INTERNACIONAL]. Análisis de datos cualitativos con ATLAS.ti. 15a edición, Villahermosa, Tabasco.

Denzin, N. K., & Lincoln, Y. S. (2017). *The Sage Handbook of Qualitative Research*. SAGE Publications.

Dominguez, R. (2012). Completing The Dissertation: Its Not Only About Academics. *College Teaching Methods & Styles Journal (CTMS)*, *2*(2), 21–24. https://doi.org/10.19030/ctms.v2i2.6871

Dowd, J. E., Thompson, R. J., Schiff, L. A., & Reynolds, J. A. (2018). Understanding the Complex Relationship between Critical Thinking and Science Reasoning among Undergraduate Thesis Writers. *CBE—Life Sciences Education*, *17*(1), 1–10. https://doi.org/10.1187/cbe.17-03-0052

Dwihandini, L. A., Marhaeni, A. A. I. N., & Suarnajaya, I. W. (2013). The analysis of the factors affecting undergraduate students' difficulties in writing thesis in the English department of Mahasaraswati University. *EJournal Universitas Pendidikan Ganesha*, 1–12.

Echeverría Guzmán, N. Y. (2018). Teoría Educativa desde el Paradigma de la Complejidad para Formar Pensamiento Crítico y Complejo. *Revista Scientific*, *3*(9), 257–274. https://doi.org/10.29394/scientific.issn.2542-2987.2018.3.9.13.257-274

Edel, R., Duarte, V., & Hernández, S. (2006). La eficiencia terminal en la educación superior privada en México: estudio de caso de la Universidad Cristóbal Colón. *Revista de La Universidad Cristóbal Colón*, 1–13.

Elder, L., & Paul, R. (2003). *La mini-guía para el Pensamiento crítico, Conceptos y herramientas*. Foundation for Critical Thinking.

Enago Academy. (2019, June 14). *Thesis vs. Dissertation: Enago Academy*. https://www.enago.com/academy/thesis-vs-dissertation/

Ennis, R. H. (1985). A Logical Basis for Measuring Critical Thinking Skills. *Educational Leadership*, 44–48.

Ennis, R. H. (2013). The Nature of Critical Thinking: Outlines of General Critical Thinking Dispositions. *Ilinois*, 1–11. http://criticalthinking.net/wp-content/uploads/2018/01/The-Nature-of-Critical-Thinking.pdf

Ennis, R. H. (2015). Critical Thinking: A Streamlined Conception. In M. Davies & R. Barnett (Eds.), *The Palgrave Handbook of Critical Thinking in Higher Education.* (pp. 31–47). Palgrave Macmillan.

Eötvös Loránd University. (2010, April 11). *BA Thesis writing at DELP: Department of English Language Pedagogy*. School of English and American Studies: Eötvös Loránd University. http://delp.elte.hu/BAthesis.htm

Erbay Çetinkaya, Ş., & Yilmaz, S. (2017). How BA Students Perceive Graduation Thesis Writing Process: A Qualitative Inquiry. *Journal of Narrative and Language Studies*, *5*(8), 46–58.

Facultad de Lenguas. (2016a, May 16). *Licenciatura en la Enseñanza de Inglés: Facultad de Lenguas*. Retrieved November 29, 2020, from http://www.facultaddelenguas.com/lei

Facultad de Lenguas. (2016b, October). *Programa de asignatura: Metodología de la Investigación*. BUAP.

Facultad de Lenguas. (2016c, October). *Programa de asignatura: Seminario de investigación I*. BUAP.

Facultad de Lenguas. (2016d, October). *Programa de asignatura: Seminario de investigación II*. BUAP.

Fernández De Zamora, R. M. (2015). *Las tesis universitarias en México: Una tradición y un patrimonio en vilo*. Albatros.

Flick, U. (2017). *The SAGE Handbook of Qualitative Data Collection*. SAGE Publications.

Given, L. M. (2008). *The Sage Encyclopedia of Qualitative Research Methods* (1st ed.). Sage Publications, Inc.

Griffee, D. T. (2005). Research Tips: Interview Data Collection. *Journal of Developmental Education*, 1–5.

Gudiño Cuevas, S. R. (2015). *Nivel de estrés en los alumnos de Psicología de la Universidad Don Vasco ante el proceso de elaboración de tesis (Undergraduate Thesis)*. UNAM.

Hampshire Collage. (2015, August 2). *What is Research?: Hampshire Collage*. https://www.hampshire.edu/dof/what-is-research

Handwerker, W. P. (2005). Sample Design. In *Encyclopedia of Social Measurement* (pp. 429–436). Elsevier.

Hassan Al Badi, I. A. (2015). Academic writing difficulties of ESL learners. *WEI International Academic Conference Proceedings*, 63–76. https://www.westeastinstitute.com/wp-content/uploads/2015/02/Ibtisam-Ali-Hassan-Al-Badi-full-Paper.pdf

Hawes, G. (2003). *Pensamiento crítico en la formación universitaria*. Instituto de Investigación y Desarrollo Educacional de la Universidad de Talca.

Hernández Méndez, E., & Reyes Cruz, M. D. R. (2014). Research Culture in Higher Education: The Case of a Foreign Language Department in Mexico. *PROFILE Issues in Teachers' Professional Development*, *16*(2), 135–150. https://doi.org/10.15446/profile.v16n2.40819

Hernández Zamora, G. (2009). Escritura académica y formación de maestros ¿Por qué no acaban la Tesis? *Tiempo de Educar*, *10*(19), 11–40.

Ibarra-López, P. (2017). La titulación por tesis en México: el problema de su conceptualización. *Revista Dilemas Contemporáneos: Educación, Política y Valores*, *3*(31), 1–22. https://www.researchgate.net/publication/330292919_La_titulacion_por_tesis_en_Mexico_el_problema_de_su_conceptualizacionhttps://www.researchgate.net/publication/330292919_La_titulacion_por_tesis_en_Mexico_el_problema_de_su_conceptualizacion

Imperial College London. (2014, July). *Roles and Responsabilities: Research Degree Supervisor*. Retrieved November 9, 2020, from https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/qa/public/good-practice/roles-and-responsibilities/Research-Degree-Supervisor.pdf

Iqbal, M., Jalal, S., & Mahmood, M. K. (2018). Factors Influencing Research Culture in Public Universities of Punjab: Faculty Members' Perspective. *Bulletin of Education and Research*, *40*(3), 187–200.

Katayama Omura, R. J. (2014). *Introducción a la Investigación Cualitativa: Fundamentos, métodos, estrategias y técnicas*. Universidad Inca Garcilaso de la Vega.

Katz, M. (2006). *Study Design and Statistical Analysis* (1st ed.). Cambridge University Press.

Kowalczyk, D., & Scalia, S. (2013, July 25). *What is Research? - Definition, Purpose & Typical Researchers*. Study.Com. https://study.com/academy/lesson/what-is-research-definition-purpose-typical-researchers.html.

Kvale, S. (1996). *Interviews: An Introduction to Qualitative Research Interviewing* (1st ed.). SAGE Publications.

León Monteblanco, L. C. (2006). *Guía para el Desarrollo del Pensamiento Crítico*. Ministerio de Educación-Peru.

Lestari, D. M. (2020). An Analysis of the Students' Difficulties in Writing Undergraduate Thesis at English Education Study Program of Muhammadiyah University of Bengkulu. *Premise: Journal of English Education and Applied Linguistics*, *9*(1), 17–29. https://doi.org/10.24127/pj.v9i1.2588

Lopatto, D. (2003). The Essential Features of Undergraduate Research. *Council on Undergraduate Research Quarterly*, *24*, 139–142.

López Aymes, G. (2012). Pensamiento crítico en el aula. *Docencia e Investigación*, *37*(22), 41–60.

López Del Mar, J. (2016, January 9). *Qué es una Tesis y para qué sirve*. PUBIABM. http://www.pubiabm.com.py/2020/12/13/que-es-una-tesis-y-para-que-sirve/

Lundgren, S. M., & Robertsson, B. (2013). Writing a bachelor thesis generates transferable knowledge and skills useable in nursing practice. *Nurse Education Today*, *33*(11), 1406–1410. https://doi.org/10.1016/j.nedt.2012.10.019

Macmillan. (2020). Explore. In *Macmillan Dictionary*. https://www.macmillandictionary.com/us/dictionary/american/explore

Macmillan. (2021a). Dissertation. In *Macmillan Dictionary*. https://www.macmillandictionary.com/dictionary/british/dissertation

Macmillan. (2021b). Motivation. In *Macmillan Dictionary*. https://www.macmillandictionary.com/dictionary/british/motivation

Macmillan. (2021c). Thesis. In *Macmillan Dictionary*. https://www.macmillandictionary.com/dictionary/british/thesis

McPeck, J. E. (2016). *Critical Thinking and Education*. Taylor & Francis.

Memorial University. (2020, May). *Thesis Impact Statement: COVID-19: School of Graduate Studies*. Retrieved November 9, 2020, from https://www.mun.ca/sgs/go/guid_policies/Thesis_Impact_Statement.pdf

Merino Solari, R. (2019). Factores Que Influyen En La Elaboración Del Proyecto De Tesis De Maestría. *Acta Herediana*, *62*(2), 134–142. https://doi.org/10.20453/ah.v62i2.3616

Montiel Romero, J. (2019, August 22). *¿Por qué es importante hacer una tesis?* Profesionistas.Org.Mx. https://profesionistas.org.mx/por-que-es-importante-hacer-una-tesis/

Morfinez Cortes, E. (2017). *Dialogue in ELT Group-Based Thesis Supervision: An Exploratory Case Study [Master Thesis, Benemérita Universidad Autónoma de Puebla]*. BUAP.

RIAA: https://hdl.handle.net/20.500.12371/604

Nunan, D. (1992). *Research Methods in Language Learning*. Cambridge University Press.

Olivares Olivares, S. L. (2012). Desarrollo del pensamiento crítico en ambientes de aprendizaje basado en problemas en estudiantes de educación superior. *Revista Mexicana de Investigación Educativa*, *17*(54), 759–778.

Olsen, W. (2004). Triangulation in Social Research: Qualitative and Quantitative Methods Can Really be Mixed. *Developments in Sociology*, 103–118.

Oxford Reference. (2018). Exploratory research. In *Oxford Reference*. https://www.oxfordreference.com/view/10.1093/acref/9780199590230.001.0001/acref-9780199590230-e-0675

Postgrad. (2020, October 24). *What is the Difference Between a Dissertation and a Thesis?* https://www.postgrad.com/advice/exams/dissertation-and-theses/difference-between-a-dissertation-and-a-thesis/

Puspita, C. (2019). *Factors Affecting Students' Difficulties In Writing Thesis: A Mixed-Methods Research at Eighth Semester of English Study*. 3rd English Language and Literature International Conference, Semarang, Indonesia.

RAE. (2021a). Disertación. In *Diccionario de la lengua española*. https://dle.rae.es/disertaci%C3%B3n

RAE. (2021b). Tesis. In *Diccionario de la lengua española*. https://dle.rae.es/tesis?m=form

Rehman, M. (2020, July 6). *Delay in degree completion because of COVID-19 pandemic & it's effect?* ResearchGate. https://www.researchgate.net/post/Delay_in_degree_completion_because_of_COVID-19_pandemic_its_effect

Reynolds, J. A., & Thompson, R. J. (2011). Want to Improve Undergraduate Thesis Writing? Engage Students and Their Faculty Readers in Scientific Peer Review. *CBE—Life Sciences Education*, *10*(2), 209–215. https://doi.org/10.1187/cbe.10-10-0127

Rusu, O. (2020, May 29). 36% of students consider changing their academic plans due to COVID-19. *Studyportals*. https://studyportals.com/press-releases/36-of-students-consider-changing-their-academic-plans-due-to-covid-19/

Sadeghi, K., & Shirzad Khajepasha, A. (2015). Thesis writing challenges for non-native MA students. *Research in Post-Compulsory Education*, *20*(3), 357–373. https://doi.org/10.1080/13596748.2015.1063808

Sánchez De La Torre, P. (2010). *Nivel de ansiedad que genera la elaboración del trabajo de Tesis [Bachelor Thesis, Universidad Nacional Autónoma de México]*. UNAM.

TESIUNAM. http://132.248.9.195/ptb2011/enero/0665651/Index.html

Seymour, E., Hunter, A. B., Laursen, S. L., & DeAntoni, T. (2004). Establishing the benefits of research experiences for undergraduates in the sciences: First findings from a three-year study. *Science Education*, *88*(4), 493–534. https://doi.org/10.1002/sce.10131

SkillsYouNeed. (2015, April 4). *Writing a Dissertation or ThesiS*. https://www.skillsyouneed.com/learn/dissertation-writing.html

Stake, R. E. & SAGE. (1995). *The Art of Case Study Research*. SAGE Publications.

Strauss, P. (2012). 'The English is not the same': challenges in thesis writing for second language speakers of English. *Teaching in Higher Education*, *17*(3), 283–293. https://doi.org/10.1080/13562517.2011.611871

Suyadi, Husnaini, & Elvina. (2020). Undergraduate students' difficulties in writing a research proposal: A case study. *International Journal of Scientific & Technology Research*, *9*(3), 838–

843. http://www.ijstr.org/final-print/mar2020/Undergraduate-Students-Difficulties-In-Writing-A-Research-Proposal-A-Case-Study.pdf

Swedberg, R. (2020). On the Uses of Exploratory Research and Exploratory Studies in Social Science. In J. Gerring, C. Elman, & J. Mahoney (Eds.), *The Production of Knowledge* (pp. 17–41). Cambridge University Press.

Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *SSRN Electronic Journal*, *5*(3), 28–36. https://doi.org/10.2139/ssrn.3205040

Tapia, R. E. (2013, January). Thesis Writing as a way to enhance English Language Teaching (ELT) professional development. *TEIS News*. http://newsmanager.commpartners.com/tesolteis/issues/2013-01-04/4.html

Thabran, Y., & Fajaryani, N. (2017). Why It Took so Long to Complete Undergraduate Thesis at English Department: Students' and Lecturers' Voices. *Advances in Social Science, Education and Humanities Research*, *82*, 180–184.

The ArtScience Interfaculty. (2016, May 5). *Bachelors Thesis*. http://www.interfaculty.nl/bachelors-thesis/

The WritePass Journal. (2013, March 15). *What is a Dissertation, and Why is it Important?* https://writepass.com/journal/2013/03/what-is-a-dissertation-and-why-is-it-important-2/#:%7E:text=It%20is%20seen%20as%20a,use%20the%20appropriate%20research%20tools.

Tiwari, H. P. (2019). Writing Thesis in English Education: Challenges Faced by Students. *Journal of NELTA Gandaki*, *1*, 45–52. https://doi.org/10.3126/jong.v1i0.24458

UNAM. (2020, June 15). *La UNAM en números: Dirección General de Planeación*. Retrieved October 10, 2020, from https://www.estadistica.unam.mx/numeralia/

Universiamx. (2016, December 8). *8 Mitos sobre la producción de una tesis de grado*. https://www.universia.net/mx/actualidad/orientacion-academica/8-mitos-sobre-produccion-tesis-grado-1147271.html

University of Buffalo. (2006, July 19). *University Honors College Senior Thesis Handbook: University Honors College*. https://honors.buffalo.edu/advanced/pdfs/thesishandbook.pdf

UQRoo. (2015, March 16). *Tips para la redacción de tesis:* Universidad de Quintana Roo. http://web.uqroo.mx/archivos/jlesparza/acpsc142/Tips%20tesis%20Dr%20Cabrera.pdf

VIEP. (2020). *Haciendo Ciencia en la BUAP Primavera XV 2020: Dirección General de Divulgación Científica*. Vicerrectoría de Investigación y Estudios de Posgrado. Retrieved November 13, 2020, from http://www.viep.buap.mx/divulgacion/ji15-convocatoria.php

Zangirolami-Raimundo, J., Echeimberg, J. D. O., & Leone, C. (2018). Research methodology topics: Cross-sectional studies. *Journal of Human Growth and Development*, *28*(3), 356–360. https://doi.org/10.7322/jhgd.152198

BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA
Facultad de Lenguas
Maestría en la enseñanza del Inglés

The purpose of this survey is to collect data for the completion of the thesis "Students' challenges to engage with a thesis development based on a critical thinking analysis: LEI-BUAP". Your support is valuable, please answer the following questions in the most honest way.

1.   What kind of experiences, aids, or activities had you done which helped you to start developing your thesis?

2.   What kind of issues have you face when investigate the literature, applying research methodologies, and analyzing the data?

3.   How do you consider your English level and writing style to produce an academic paper?

4.   What was your first idea and feeling about start writing your thesis?

5.   How has the thesis impacted on your way of thinking, mood and/or behavior?

6.   How has the thesis changed your perspective towards yourself?

7.   How have your family supported you in your thesis writing process?

8.   What other responsibilities do you have and that have interfered with your thesis development?

9.   How does your economic situation have impact on the development and possible conclusion of your thesis?

10.   What aspects, actions and/or qualities do you consider beneficial to be applied by your thesis supervisor?

11.   What factors may negatively affect your thesis development and conclusion of your thesis?

12.   What kind of institutional support do you consider valuable for students who are starting to write their thesis?

13.   What institutional programs or resources does your research seminar professor and your thesis supervisor have encourage you to use to develop your thesis?

14.   What kind of institutional support do you consider may help you to finish and submit your thesis as a graduation modality?

BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA
Facultad de Lenguas
Maestría en la enseñanza del Inglés

The purpose of this survey is to collect data for the completion of the thesis "Students' challenges to engage with a thesis development based on a critical thinking analysis: LEI-BUAP". Your participation is valuable, please answer the following questions in the most honest way.

1. What kind of academic writing activities, classes, and courses have you done that consider valuable to develop your thesis, and how they have helped you?

2. What kind of academic resources (like books, guides, workshops) have you used in your academic life to enhance your writing, and these now help you in your thesis writing?

3. Taking into consideration the institutional standards and criteria given by the program to writing a thesis, how do you consider the academic writing quality of your thesis chapters and what you need to improve in each of them?

4. How have your beliefs and feelings regarding the thesis influenced your thesis development process before and after start witting it?

5. How has the thesis experience changed your mood and/or thinking about the way of writing in other academic situations, could you give an example?

6. How has your family emotional support impacted in your thesis writing process?

7. How have family responsibilities (like economic issues, work, or family) concerned you in accomplishing your thesis project?

8. Academically speaking, how do unforeseen situations like COVID have impacted your thesis writing process?

9. How does the academic relationship with your thesis supervisor influence your thesis writing process?

10. What challenges have you faced understanding your thesis supervisor's advice, how do you implement his/her comments to modify your writing?

11. What institutional programs or investigation resources did your research seminar professor and/or your thesis supervisor have encouraged you to use to write your thesis and how did you apply them?

12. What aspects do you consider your institution could implement to help students writing their theses and why?

Transcription 4

INTERVIEWER: ok, hello, how are you today?

PARTICIPANT 4: Hello, I'm (unintelligible), thank you.

INTERVIEWER: OK, very good. So, as I mentioned the purpose of this survey is to correct data for the completition of the thesis: Students' challenges to engage with a thesis development based on a critical thinking analysis: LEI-BUAP. So, your participation is very valuable so please answer the following questions in the most honest way. all the information you provide here will be completely anonymous and your identity will be protected. is that OK?

PARTICIPANT 4: OK. Yeah.

INTERVIEWER: OK, so let's start. OK, question #1. What kind of academic writing activities, classes, and courses have you done that consider valuable to develop your thesis and how they have helped you?

PARTICIPANT 4: Eh, I think the activities they are, that have helped me most are the ones that are comparing previous thesis for more classmates, from the same faculty. Eh, as we have done in research seminar I and II, they gave, they give us two different thesis and we compare them, eh to get the conclusion about how to make all, all of this ___ I think, yeah, that's the one that helped me most.

INTERVIEWER: OK, have you taken another kind of classes or courses to help you develop your thesis?

PARTICIPANT 4: No, not really. I have only taken the ones that are the program of my career because I'm not really going to present the thesis to graduate so I haven't taken extra classes for that.

INTERVIEWER: OK, very good. So, question #2. What kind of academic resources like books, guides, or workshops have you used in your academic life to enhance your writing and this now help you in your academic life? Since you ingress the University.

PARTICIPANT 4: Eh, I think I've used, eh, mostly articles from journals, eh, they have been taken from different websites and even some books that I have borrowed from the library at school. Uh, I think the part where I was researching more into academic writing was just in that class, academic writing I and II. at the faculty, and that's the main develop, most of my abilities that I'm using now to write my thesis

INTERVIEWER: OK, can you mention the name of that book that you used or one article that you referenced?

PARTICIPANT 4: <u>Eh</u>, I'm, I don't remember exactly the names of them because I read a lot because they used to make us write essays about the articles we read. <u>ehh</u>

INTERVIEWER: Ok, don't worry. OK, let's move on question #3. Taking into consideration the institutional standards and criteria given by the program to write a thesis, how do you consider the academic writing quality of your thesis chapters and what you need to improve in each of them?

PARTICIPANT 4: I think that ... the program, I mean, the quality of the classes given are good because ___ I mean but it depends most, more of the teacher that gave that class because I mean, I think, I have blocked that I could, I had good teachers and <u>I</u>, I think my writing skills are good, but I know that there are some teachers that maybe not ___ give the classes it is supposed to be given and students do not develop their, their ability properly or such as it should develop.

INTERVIEWER: Ok, you mentioned you have a good writing quality. Do you consider you need to improve in some of your chapters? In chapter I, chapter II. Even when you don't need your thesis to graduate. you need, you have some challenges there?

PARTICIPANT 4: Yeah, I mean, even though my, I think my writing skill is good, I always need to improve. I think since chapter I, since even the introduction ___ because I think that we need is the lack of experience for writing since most of our teachers have been writing since they started their careers and writing articles and so on. And we're fully written es-, essays or another kind of, <u>ehr</u>, documents to. So, yeah, <u>I, I</u>, I think the most challenging part is to be able to summarize different resources in order to make it be my own information to avoid plagiarism.

INTERVIEWER: Ok, thank you very much. So, let's move on question #4. How have your believes and feelings regarding the thesis influence your thesis development process before and after start writing? so how do you start feeling before you start writing your thesis and how do you feel no? Make a Comparation.

PARTICIPANT 4: <u>Eh</u>, when I started, I was feeling like kind of confident because I thought it was going to be easy and because of the topic, is the topic that I like that I can get into it, but as I started writing it I started finding different challenges and starting to feel kind of concern because I wasn't sure about where my thesis were, was going to. But with the help of my teachers, <u>eh</u>, I am feeling confident again because I now found where my thesis is going to, how I gonna develop it, till the end.

INTERVIEWER: OK, very good. So, question #5. How has the thesis experience change your mood or thinking about the way of writing in *another* academic writing situations? could you give me an example? so how the thesis changed your perspective towards *another* academic writings?

PARTICIPANT 4: <u>Uh</u>, I think it changed, when writing, for example essays because in the past I used to write them just like ___ <u>eh</u>, very simple, in a simple way and now that I've been written more advanced documents such as my thesis, I think like I put more effort into writing not just an essay or another kind of academic paper that is not as important or as advanced as my thesis.

INTERVIEWER: OK, very good. Let's move on question #6. How has your family emotional support impact in your thesis writing process? Even emotional or if they give you some advice from feedback if they do.

PARTICIPANT 4: So, when I started writing it, eh I was living at Puebla alone because I'm not from there, I'm from a little town. So, my family wasn't really influencing <u>my</u>, my writing experience because I was on my own. But then, since COVID things started then I came back to my hometown with my family, they have really helped me more like, more emotionally because they're like they see me kind of stress and they give me words <u>so</u> ___ <u>eh</u> ___ to make me feel that they are helping me, and they support me with this thing. So yeah, first I was on my own but now I am, have their support

INTERVIEWER: But you mean emotional support, like they are cheering you?

PARTICIPANT 4: Yeah, yeah, just emotional ___ because, <u>eh</u>, I don't really ask them for help to writing because, I mean first they don't speak English so they don't really master the topic that I'm working on. So yeah, just to emotional support.

INTERVIEWER: OK, that's good. So, let's move on question #7. How have family responsibilities like economy issues, work, or even if you have your own family, how these responsibilities concern you in accomplishing your thesis project?

PARTICIPANT 4: <u>Eh</u>, not really because, eh, the only thing I do right now its school. I don't work, I have economic responsibilities, so I think that's a good point for me or an advantage since my only responsibility now it's school, writing my thesis.

INTERVIEWER: Ok, verry good. Ok, question #8. Academically speaking how do unforeseen situations like accidents, illness, or even this pandemic, how these situations have impact you, sorry, in your thesis writing process?

PARTICIPANT 4: <u>Uh</u>, I think the main problem is the gathering information because since, I mean there's a lot of information on the Internet but so sometimes we need to look into physical books that were easily ___that I could easily get when I was at school but now with this pandemic I can go to libraries or to school library. So, I think the most impact I've been have, that I have with it is the, yeah, I cann't gather information on physical books on libraries and I have to focus, or to be able to work only with things that are in the Internet. And sometimes, they're not free so I have to pay for them so that's my problem.

INTERVIEWER: Ok, that just talking about the pandemic situation, but have you suffered an accident or an illness that impacted in your thesis wiring process in a ___way?

PARTICIPANT 4: <u>Ahh</u>, no, not really. <u>Uh</u>, I've been lucky that I haven't suffered any of those situations so just a pandemic.

INTERVIEWER: OK, very good. OK, question # 9. How does the academic relationship with your thesis supervisor or your seminar professor have influenced your thesis writing process?

PARTICIPANT 4: <u>Uh</u>, it's, I mean, <u>I</u>, I know the teachers since I was in third semester and I have taken many classes with her, so I think that we are, we have the confidence to, I have the confidence to ask her for help and also, she has the confidence to show me my mistakes and to help me, eh, with everything I need on my thesis. So, I think having her as my teacher is been real support for me because maybe it was another teacher that I haven't take, taking classes with, it would be a bit harder for me to talk to the (unintelligible) to ask for help.

INTERVIEWER: OK, excellent. Let's move on question 10. What challenges have you faced understanding your thesis supervisor or seminar professor advice? how do you implement his or her comments to modify your writing? So, what challenges do you face when he or she gives you feedback or advice and how do you apply strategies to, to implement his comments? His or her comments.

PARTICIPANT 4: <u>Eh</u>, I think the most challenged that, I had, the first was to understand the advices because I'm not really, <u>I</u>, I don't really know many concepts or the whole concept of writing a thesis and sometimes I didn't understood what she was, what she meant, or what she wanted me to do. Uh, the only thing I did was just researching and reading some other pieces understand how it is written and to be able to understand her advices, and how she corrected me.

INTERVIEWER: Very good, so you compare with another thesis to get your strategy. Good, ok. Very good. OK, question number 11. What institutional programs or investigational resource did you research seminar professor, or your Thesis supervisor have encouraged you to use to write your thesis and how do you apply them? I'm talking about the institutional programs like another kind of workshops, subjects ,or even investigation resources, like, or in the web?

PARTICIPANT 4: So, teacher has suggested us to use, eh, different resources to get ,to gather information such as, ahh, Google academic or ___ I don't know, I don't remember the name of them. but just websites to gather information from different ___ <u>eh</u>, authors. And also, we have just in the "repositorio" from BUAP to gather information from thesis that are related to our career. Even from, some, classmates, that graduated some years ago. So yeah, mostly we've been using, those kind of work, previous work, that is, that may look similar to what we're doing so we have, <u>a</u> clear idea of what we're going to do.

INTERVIEWER: Ok, very good. OK the last question. Question # 12, What aspects do you consider your institution could implement to help students writing their thesis and why? So, what, what are your feelings about this, what kind of programs, activities ___ something that you considered institution could implement to help students writing and even submit their thesis?

PARTICIPANT 4: Eh, I think we should start earlier <u>to, eh</u>, not writing but thinking about the topic we are gonna write about, because sometimes when you get to the point that you are going to have to start writing, there they are like: OK what is your topic? And you're not ready to choose a topic if(?) you haven't. I mean you, you read many topics about your degree, but you are not ready to, in just a week, to choose a topic because you haven't, I mean you, you read many topics about your degree, but you are not ready to, in just a week to choose a topic and start writing on

it. So, I think they should, <u>eh</u>, promote start thinking about your topic earlier than just the last two semesters. Because that makes it harder to choose a topic.

INTERVIEWER: OK, very good. So, start thinking about what are you going to, to focus on to write your thesis since an early stage, isn't it?

PARTICIPANT 4: Yeah, yeah,

INTERVIEWER: [Another kind of ___ strategy to implement?

PARTICIPANT 4: <u>Ehm</u>, maybe, maybe, implement, extracurricular courses or, not extracurricular because I think they are needed, <u>uh</u>, about writing because we have, I mean, we have Academic Writing I and II, but I don't think that's enough, because on that, on that, those courses we learn about different writing and not focusing on thesis. So, I think implementing another class other course which goes before the last courses that focus on specific writing, <u>eh</u>, the writing skill not the researching, because we have research methodology, with the writing part. 'cause I think that, that most students lack ___

INTERVIEWER: Yeah, the writing styles. So, you mean the writing styles about how to write a thesis-

PARTICIPANT 4: [Yes, yeah

INTERVIEWER: OK, so thank you very much. As I mentioned this, this survey will be transcribed to help me to write my thesis. thank you for your support.

PARTICIPANT 4: You're welcome.

Appendix IV

	Código	Comentario
Research background	Analyzing data	Understanding of data analysis process
	Avoid plagiarism	Awareness of ways of plagiarism and the ways of avoiding it in the writing
	Citation	Knowledge and awareness of using APA norms to cite properly in the text
	Contrasting	Comparing ideas, methods, and writing style from other research papers with the written thesis
	Delimitate the topic	Defining and delimitating the boundaries of the research study
	Experience researching	All experience in looking for information for academic papers
	Paraphrasing	The incorporations of other's words by reducing and changing the structure of the sentence
	Quotation	The properly use and incorporation of other's ideas in the text
	Structure of the writing	Knowledge of the proper writing structure of the thesis
	Understanding methodologies	Knowledge selecting and applying the proper methodology for the study
	Writing academic papers	Experience writing another type of academic papers
	Writing the introduction	Knowledge and clarity to introduce the thesis study
English Language Proficiency	Coherence and cohesion	The ability to make ideas clear and connected throughout the text
	Fluency	The ability to speak or write a language easily, well, and quickly
	Formality	The proper use of language to communicate your ideas with the academic audience
	Proper use of connectors	The use of conjunctive words to connect clauses or sentences
	Reading skill	The proficiency to comprehend and retain information from texts
	Vocabulary	All the words known by the research that may facilitate express him/herself
	Writing skill	The proficiency of expressing in a written way
Student's attitude towards writing a thesis	Afraid	To be worry or anguished about the process of writing a thesis
	All-But-Thesis	Students who, having completed all the subjects or requirements of a career, are late or do not finish the thesis
	Anxious	An enthusiastic attitude towards the thesis writing processes
	Carefree	Having no problems or not being worried about anything
	Confused	With an unclear idea about the process of writing a thesis
	Excited	Feeling happy and/or enthusiastic about the process of writing a thesis
	Insecure	Little confidence or uncertainty about their own abilities to develop a thesis
	Low knowledge	Have a low knowledge and experience about writing academic papers
	Motivated	To be determined to complete the thesis
	Neutral	Not saying or doing anything that would show an attitude towards the thesis
	Optimistic	Being full of hope and emphasizing the good aspects of writing a thesis
	Pessimism	Thinking of the bad part of writing a thesis emphasizing the issues that may appear in the process
	Prepared	To be secure about their abilities and knowledge to write a thesis
	Reluctant	An attitude of not wanting to do the thesis
	Scared	To be frighten about failing or do not have the capacity to write the thesis

Psychological issues	Anxiety	The feeling of excessive worry, fear and nervousness about thesis development process
	Depression	A feeling of deep sadness for not being able to complete the thesis
	Discouragement	The feeling of having lost your confidence or enthusiasm for writing the thesis
	Enthusiasm	The feeling of energetic interest and positiveness for writing the thesis
	Frustration	The feeling of anger and less confidence for not being able to complete the thesis
	Resignation	A sad feeling of accepting something that you do not like
	Resilience	A feeling of success, hope, or happiness again after experiencing the thesis writing challenges
	Stress	The feeling of great worry and despair caused by the thesis development process
	Worry	The feeling of unhappiness and frightening about the development and completion of the thesis
Family influence	Demotivation	Family lack of interest in and enthusiasm about student's thesis writing process
	Deterrent	Attitudes and actions from the family that may deter a student from writing the thesis
	Downplaying	Wrong family attitudes and suggestions that may affect the thesis development process
	Family academic advice	All the academic suggestions, advice and guidance that experienced relatives may give to the student
	Family approval	Family approval towards the student's decision of writing a thesis
	Family motivation	Family cheering to motivate the student to complete the thesis.
	Helping to write	All the helping that family may give the student to facilitate the thesis writing process
	Incomprehension	The family inability to understand the thesis development process
Socio-economic	Economic issues	Needing of money to continue the studies and/or submitting the thesis
	Lack of time	Little time to develop the thesis due to another responsibilities and factors
	Nonlocal student	Issues, aspects, and/or influence that may have the change from a place of residence to a near one to the university.
	School pressure	Lack of time due to other assignments and duties of other classes
	Work interference	Lack of time and disposition to write the thesis due to work responsibilities
Thesis supervisor relationship	Authoritarianism	Thesis supervisor attitude that students must obey completely his commands for writing a thesis or limiting their writing freedom
	Confidence	Being certain and trust in the thesis supervisor and his/her researching abilities
	Confusion	Do not understand how to continue with the thesis or what should do to solve a writing issue
	Dialogue	Dialogical interactions for the Research supervision
	Disinterest	A lack of interest from the student and the thesis supervisor for the thesis development process
	Doubs	Unresolved doubts about the thesis writing
	Encouragement	Professor's words or behavior that give the students the confidence to develop their thesis
	Feedback	Information or statements of opinion about the information used, methodology, and writing style of the thesis
	Lack of guidance	Lack of help and advice about how to solve issues related to the thesis writing

	Low confidence	Not being so certain or trust at all in thesis supervisor and his/her abilities to solve researching doubts
	Misunderstanding	Occasions when the student does not understand the thesis supervisor's directions and advice correctly
	Suggestions	Ideas, plans, or action that the thesis supervisor suggests solving student's doubts
Unforeseen situations	Change of plans	Changing the original idea of the thesis for another one suitable for the pandemic situation
	Delays	Actions postponed later than originally planned or expected
	Illness	Illness, diseases, and other medical conditions
	Lockdown	Issues related to the emergency situation in which mobility was reduced to decrease infections
	No Face-to-face interaction	Issues related for not having a face-to-face interaction
	No library	Issues related to the close libraries
	Online classes	Taking classes from internet platforms
	Technical Difficulties	Hardware failures, software bugs, and lack of technical knowledge that make difficult the online study and thesis development
	Virtual platforms	Virtual platforms used for classes and meetings
Institutional support to help	Courses	Classes dedicated to methodology research and thesis seminar
	Electronic resources	Search engines, word processors, e-journals, eBooks, specialized software
	Lectures	Formal talks given to students about the experiences of the thesis writing process
	Printed resources	Books, professor's copies, worksheets
	Professors	Qualified and experienced professors to give the class
	Syllabus	The subjects or books to be studied
	Tutorials	Period of study with a tutor
	Webinars	Educational content in video format that is delivered over the internet
	Workshops	Practical work in conducting research
Elements to motivate students	Guidance booklet	A model or guide to follow for thesis writing
	More academic support	Give more importance to the student's thesis work
	More interest	More interest by both students and thesis supervisors for the thesis development
	More practice	More practice in developing academic papers and conducting research
	More resources	Necessity for more printed resources and access to electronic ones
	More time	More time to develop the thesis
	Special courses	Dedicated courses to teach all the aspect for thesis writing

Appendix V

Scan the QR code to get the full image

Option 1 – Google Drive

Option 2 - Mega