Dental graduates' views on the bachelor thesis supervision process

Perspectivas de los graduados de Odontología sobre la supervisión (asesoría) de la tesis de licenciatura

Perspectivas de graduandos em odontologia sobre a orientação da tese de bacharelado

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Abstract

We identified graduates' views on their thesis supervision process as led by their thesis advisors. A qualitative study of graduates of the School of Dentistry of Universidad Nacional Mayor de San Marcos (Lima, Peru) included semi-structured interviews. The study categories were planning activities with the advisor, the advisor's decisions, and general views on the advisor. Of the 20 interviewees, 12 (60%) were women. Planning was insufficiently discussed with the advisor; most interviewees said that they never had a first meeting to coordinate what the advisory sessions would be like. Dental students do not have a favorable view of thesis advisors. The main negative aspects were the lack of planning of activities and meetings.

Keywords: thesis, research projects, students, School of Dentistry.

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Resumen

Se identificó las perspectivas que tienen los graduados sobre los procesos de supervisión que tuvieron con sus asesores de tesis. Estudio cualitativo cuya población fueron graduados del pregrado de la Facultad de Odontología de la Universidad Nacional Mayor de San Marcos (Lima. Perú), a través de entrevistas semiestructuradas. Las categorías de estudio estuvieron relacionadas con la planificación de las actividades con el supervisor, decisiones del supervisor y percepciones generales sobre el supervisor. De los 20 entrevistados, 12 (60%) fueron mujeres. La planificación fue indicada como uno de los elementos que poco se discutió con el asesor, la mayoría indicó que nunca tuvieron una primera reunión para coordinar cómo serían las sesiones de asesoría. La percepción que se tiene de los supervisores de tesis no es adecuada por parte de los estudiantes de Odontología. Los principales aspectos negativos estuvieron relacionados a la falta de planificación de las actividades y reuniones.

Palabras clave: Tesis, Proyectos de investigación, Estudiantes, Facultad de Odontología.

Resumo

Foram identificadas as perspectivas que os egressos têm sobre os processos de supervisão que tiveram com seus orientadores de tese. Estudo qualitativo cuja população foram graduandos da Faculdade de Odontologia da Universidad Nacional Mayor de San Marcos (Lima, Peru), por meio de entrevistas semiestruturadas. As categorias do estudo foram relacionadas ao planejamento das atividades com o supervisor, decisões do supervisor e percepções gerais sobre o supervisor. Dos 20 entrevistados, 12 (60%) eram mulheres. O planejamento foi apontado como um dos elementos pouco discutidos com a assessoria, a maioria indicou que nunca teve uma primeira reunião para coordenar como seriam as sessões de assessoria. A percepção dos orientadores de tese não é adequada por parte dos alunos de Odontologia. Os principais aspectos negativos foram relacionados à falta de planejamento das atividades e reuniões.

Palavras-chave: Pesquisa, Estudantes, Percepção, Odontologia, Educação.

Introduction and background

Research is one of the main university functions, either through developing people's skills or creating scientific knowledge. Regarding training, final projects, dissertations, theses, and scientific publications allow students to develop their skills. This helps them take their first steps in postgraduate scientific studies. Writing a thesis/dissertation entails compiling information or implementing a specific topic. Also, a solution method is proposed, and results are sought and discussed. This work is essential as it requires students to write a thesis to obtain an academic or professional degree. This final project also allows students to show that they have mastered a subject and handle methodological techniques and basic research skills. Writing a university thesis is not a linear or fixed process: it requires an academic structure involving the student (thesis candidate), the advisor (thesis director/supervisor), and the context in which the work will be done. This exercise involves training processes, motivations, uncertainties interests, beliefs, decisions, commitments, regulations, and spaces and times where the relationship between the thesis candidate and the

advisor is essential.

Not all thesis candidates complete their work: 20-30% never complete their thesis, and 79% do it successfully.[1] The main reasons students do not complete their theses are lack of support from the advisor, lack of financial resources,[2] and poor supervision.[3] Thesis supervision is a complex form of teaching. It entails a teaching process for the supervisor and a learning process for the student.[4] Supervisors must be sensitive to all the differences among students: the level and amount of supervisor support needs to be tailored to the needs of the students, so the nature of the support required varies for each student.[5]

Writing a university thesis requires the candidate and the advisor to coordinate and forge a positive relationship that allows for student training and shows commitment and dedication. This demands that the advisor and the student be aware of their roles and duties; however, these considerations are unclear, and many universities have not defined them clearly. This leads to factors that hinder the progress of the thesis and discourage the thesis writer. The candidates might postpone or cancel the project or look for other illegal or unethical means to complete the thesis: consulting companies or pseudo-advisors for profit that write the students' theses.[6]

Studies on supervisor/thesis writer relationships have focused on postgraduate candidates[7] and very little on undergraduate students' views.[8] Identifying these views provides insight into the supervisors' research and communication skills as needed by students and the processes that motivate or discourage students. Hence the importance of identifying how the thesis supervisor is perceived since it allows us to identify what can be improved or planned as strengthening and training sessions for thesis advisors. Therefore, this study aims to identify the views of graduates of a dental school on their supervision processes with their thesis advisors.

Materials and methods

A qualitative study was designed to collect information through open-ended questions and explore individuals' subjectivities.[9] The population was students who had graduated from the School of Dentistry of Universidad Nacional Mayor de San Marcos (Lima, Peru) who had completed their bachelor's thesis during 2019-2020. No sample size was calculated because we aimed to understand a largely unknown phenomenon better.[10] Under this design, we decided to include graduates who could participate in the semi-structured interviews until saturation was achieved. We included the students who had completed their undergraduate thesis and whose data were available from the Cybertesis portal (https://cybertesis.unmsm.edu.pe/handle/20.500.12672/13). We considered the theses completed up to six months before this study so that the graduates would still remember the supervision experience. All the graduates on the list[33] were sent a letter inviting them to participate in the study, but several did not respond, so the final number was 20 participants.

Graduates were invited to participate in the study by email and social media. Focus group interviews were implemented. The instrument was a semi-structured interview. Before data collection, students were informed that the study was researching the interaction between supervisors and students, the support provided by supervisors, and how students perceived feedback during supervision meetings. All participants provided their informed consent before starting data collection.

The interview included personal-academic data questions. They were answered through a Google form sent virtually (gender, age, time required to complete the thesis, current job, and time elapsed since the thesis was submitted). The form included three open-ended questions posed during the interviews: planning of activities with the supervisor (how the supervisor proposed the objectives and the activities for the ses-

sions/meetings), supervisor's decisions (actions taken by the advisor in the various stages of the thesis process), general views on the supervisor (opinions about the advisor's behavior, rigor, discipline, and values).

Four focus groups (five members each) were conducted. The research began with presenting the project to potential participants to obtain their consent to conduct the interview and schedule the interview. Participants were told that they were free to participate, that the interview would last 60 to 90 minutes, and that they were free to express themselves as they wished in each question. The principles of beneficence, autonomy, confidentiality and privacy of the information collected were respected. Recruitment decisions were based primarily on how we could access the most significant number of participants who could answer the questions. The researcher had no direct relationship with the graduates, and the sociodemographic data were kept confidential and identified through codes.

The interview was conducted via Zoom. At the beginning of the meeting, we explained the dynamics of the study, its objective and ethical considerations, and requested permission to record the session. We also told the participants that they were free to leave the meeting if they no longer wished to participate in the study. The same researcher interviewed each focus group to ensure consistency in the questions asked to each group. The researcher asked the questions to each participant in the same order. Privacy was maintained, and participants chose their names on the screen. At the end of the interview, conclusions were shared, and the participants were thanked.

Sampling continued until data saturation was reached. Saturation aims to ensure that sufficient quality data are collected to support the study. Saturation occurs when the analyzed data reaches a point when no new information is discovered. The responses were transcribed verbatim, and each participant was assigned an ID

nomenclature (P=participant). The main researcher transcribed each recording within 24 hours. The information was verified with a limited interpretation of the students' opinions to ensure its validity. An independent researcher analyzed the transcripts and verified the coding for reliability purposes. Once the information had been transcribed, we searched for thematic categories and subcategories and compared intra- and intergroup responses. No text analysis software was used.

Results

Of the 20 interviewees, 12 (60%) were women; their average age was 25.6 ± 1.75. The average time it took them to complete the thesis was 14.5 months; all of them were working in private health care when writing the thesis. The responses were grouped into the following categories:

On planning activities with the supervisor

Planning was insufficiently discussed with the advisor; most interviewees said that they never had a first meeting to coordinate what the advisory sessions would be like.

"I never had a first meeting with my advisor to plan the meetings, their duration, their frequency, what we were going to do first, second, third, etc. We had few meetings, mainly on Zoom, where we would review some of my progress (P05)."

"Generally speaking, I had the feeling that the meetings with my advisor were not planned; that is, I did not feel that we had agreed on what we were going to discuss, what was going to be reviewed, or what had to be presented (P12)."

"Because of the COVID pandemic, I met with my advisor virtually. We met a few times: about two to three meetings in this whole period. In the meetings, I would share my progress, and the advisor would give me his feedback, but we never had a session where we would agree on what we were going to do in each session (P11)."

Many candidates stated that the meetings with their supervisor were not frequent and mainly included a presentation of the progress of the thesis. Still, the supervisor had not planned the sessions, frequency, periodicity, dynamics, and demands.

On the supervisor's decisions

The graduates indicate that few advisors made decisions that contributed to the thesis. These decisions were mainly methodological and related to the writing/presentation of the thesis.

"In every meeting with my supervisor, I did most of the talking and taking the initiative. When my advisor indicated something, it was mainly about the methodology, the sample, or the instrument. In fact, when I was reading on issues related to the thesis, I focused more on the methods because that was what my advisor told me or focused on (P16)."

"My advisor was quite accurate with his suggestions and indications: s/he corrected multiple aspects of writing, content, form, and methods, although we did not meet regularly. We did write to each other by chat to coordinate my progress and deliveries. My advisor's decisions did allow me to advance my thesis (P19)."

"My advisor made very few transcendental decisions on my thesis. Most of the time, s/he made recommendations mainly on the writing and presentation. The other decisions were left to me or to what the other committee members said (P02)."

"My advisor would make recommendations on how to move forward or write the thesis; s/he rarely made decisions about the thesis as s/he gave me the freedom to do what I wanted. We did make decisions after listening to the observations of the thesis committee, and they did indicate decisions that I had to accept to improve the thesis (P07)."

Although some supervisors did make decisions that influenced the progress of the thesis, most gave the writers the freedom to make their own decisions. This freedom could be perceived from the beginning of the process and became more apparent when the committee members voiced their observations. In some cases, it was here when the supervisor made decisions to modify the thesis.

General views on the supervisor

The graduates felt that their advisors provided limited input to develop their thesis. Most respondents did not have favorable opinions, and only a small group of graduates believed that the supervisor's support and guidance had been vital. The main negative perceptions are related to few meetings with the supervisor, lack of leadership/ guidance during the sessions, lack of knowledge of the thesis topic, lack of knowledge of methodological and research aspects, lack of feedback, unconstructive criticism, and lack of interest in knowing about the progress made by the candidate. The main positive views of some supervisors included constant feedback, timely reviews, the ability to listen, a focus on the student, interest in the subject, and frequent conversations.

"Generally speaking, my advisor did not contribute much to my thesis. Although s/he gave me the freedom to write it as I liked, I would have liked more guidance. Maybe s/he could have taught me more about research and plan the process more thoroughly (P08)."

"My advisor started out well. Her/his feedback made my thesis clearer, but it fizzled out. We no longer met and only communicated via email. I was alone almost from day one, and I perceived that my advisor did not know about data analysis, so s/he did not help me with the results or the discussion (P14)."

"My advisor had an outstanding performance. Her/his criticisms and frequent meetings were beneficial. I must add that the interest s/he paid to my thesis topic was positive and motivating. There came a time when I had to teach my advisor because s/he did not know about the topic, but it was nice because we both learned from each other (P20)."

Discussion

The nature of the relationship between advisor and student can affect the success of the thesis. When inadequate, students may feel isolated. Advisors are essential in the thesis process: they have multiple roles, which include research training, mastery of the topic, providing feedback on the student's progress, critically reviewing their work, allocating time and dedication to the thesis candidate, as well as motivating them. These functions involve teaching-learning processes that prepare students for research work and aim to help them complete their university thesis satisfactorily. A one-person, direct, and individualized relationship is established between the advisor and the thesis candidate[11] that must be built throughout the thesis process. Therefore, this study assessed these relationships through the perception of dental graduates at the time of completing their undergraduate thesis.

Our findings indicate deficiencies in the planning of advisory activities and the supervisors' decision-making capacity. These decisions were not perceived as positive and failed to empower and improve the students' cognitive abilities and research skills. This is consistent with Ali et al.,[12] who state that supervisors had little or no understanding of the needs/problems of their students and their research projects. The lack of planned activities and clear decisions hinder student empowerment.[13] The lack of adequate teaching strategies limits adaptive teaching. Teachers are less prescriptive and adapt their support to the needs of students.[7] The absence and inability to provide plans and agendas for meetings, as well as insensitive attitudes such as not responding to students, reflects irresponsible, uninterested, and uncooperative behavior that affects the quality of the thesis.

Few advisors planned their activities and successfully changed decisions or adapted to problematic situations. Planning is favorable because teacher planning is a creative skill; experienced teachers do not follow a script but look for good ideas and apply them in the classroom.[14] A similar method can be applied to thesis advisors when they must solve problems that thesis candidates might have or provide creative ideas to solve specific issues.

Several graduates reported that they wanted clear guidance from their supervisors, either in the planning, development, or writing stages. When such advice is absent, thesis candidates perceive the supervisor's role as unfavorable. The supervisor should be involved with the whole thesis process and not only when there are misunderstandings or problems.[15] These "ghost supervisors"[16] negatively affect the quality of research work and the skills that students must develop to conduct independent research. An effective learning experience hinges on regular meetings, guidance, the encouraging attitude of supervisors, and a friendly mentoring relationship.[17-18] Therefore, supervisors should communicate appropriate meeting times, whenever feasible and required by the students, to ensure quality work and the timely completion of research projects. When supervisors have a careless attitude, this affects, as mentioned above, the timely completion and quality of research projects and also leads to less prepared graduates.[19]

Some thesis students had positive views of their supervisors, which coincides with the study conducted by Reeve et al.[20] They state that the freedom granted by the advisor encourages students' autonomy and sense of responsibility. But when this strategy becomes a routine script, adaptive supervision is not in place, and students may

become frustrated if supervisors allow them to control the work all the time. What is essential for a thesis process to be successful is for supervisors and students to agree on what is relevant, plan activities, and meet their objectives.[21] Good supervision and an effective advisor-student relationship are essential components of a successful program.[22] The supervisory relationship, which is essential in the debates and discussions of contemporary academia regarding the quality of research in universities, is considered an essential tool for transforming "bad" research into "good" research.[23] In other words, a good relationship between a student and a supervisor is the key to an effective and positive learning experience for students.

This study is not without limitations, as we relied on what the graduates remember about their thesis advisors. These memories may not be accurate, and they may often invent explanations or perceptions. In fact, some of our participants had difficulty reliving the encounters during the interview and reflected on their behavior. Therefore, it is better to interview students who are completing or are about to complete their thesis. Another limitation was the multiple thesis designs and the large number of advisors that the school has. These variations mean that each advisor has their own style and is perceived differently by each thesis student. Likewise, each thesis design requires particular demands and considerations that can affect the student's perception of the thesis and the advisor.

Although these are not intended to generalize or indicate how a thesis advisor should advise a student, they are relevant for teacher and advisor training. For example, we recommend the design of clear policies indicating the roles, rights, and duties of thesis students and supervisors. Additionally, new teachers can be trained on the "manual" for thesis candidates. As part of the teacher assessment process, supervisors may be asked to evaluate and reflect on the quality of their supervision, their decisions at the time, and their planning of supervision actions.

Conclusions

The views that dental students have on thesis supervisors is not favorable. The main negative aspects were the lack of planning of activities and meetings, lack of interest in supervising the thesis student, lack of commitment to the student's training, and limited decision-making capacity of the advisor. Some favorable aspects to highlight are the freedom and empowerment given to thesis candidates (which encourages their independent agency).

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