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Factors Influencing the Quality of Undergraduate Students' Degree Projects: From Student and Supervisor Perspectives

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ABSTRACT

Background: Degree projects are part of most professional study programmes and correspond to professional and academic requirements. Therefore, this study aimed to investigate factors that influence the quality of student degree projects from a supervisor and student perspective.

Methods: Semi-structured interviews were performed with eight supervisors from the study programme in dentistry at Karolinska Institutet. The interviews were transcribed. The first part was summarised and described, and the second part was analysed thematically. Also, a questionnaire was completed by 45 students in their 7th and 9th semesters of the study programme. Student responses were summarised and described.

Results: The main findings indicate a convergence of expectations and perspectives between supervisors and students regarding the factors that influence the quality of the degree project. They emphasise the importance of realistic expectations, feasibility and adherence to academic standards for a high-quality outcome. Effective supervision involves the supervisor being readily available, responsive to student inquiries and supportive in time-management. Conversely, students are expected to demonstrate motivation, engagement and increasing autonomy. Additionally, both agree that the project should be engaging, relevant to the supervisor's expertise and the student's interests, contribute to personal and academic growth and ideally result in a publication.

Conclusions: Taken together, supervisors and students share grounds for the degree project work, which is an important condition for ensuring a qualitatively sound degree project. Sharing expectations and perspectives in the beginning and having a continuously open dialogue concerning this issue during the degree project work benefits a sustainable collaboration and ensures quality.

1 | Introduction

Research is beneficial at all levels of society, and it contributes to societal development, such as the advancement and quality of healthcare, but also of education. Research fosters essential qualities of critical thinking, problem-solving abilities and

proficiency in communication [1, 2]. This benefits organisations, groups and individuals. An example of the latter is students in professional education, such as dental education, that is focused here. Dental education plays an essential role in fostering future dentists, that by scientific awareness, understanding and knowledge can contribute to the development of the profession [1]. The

Abbreviations: ECTS, European Credit Transfer System; KI, Karolinska Institutet; PhD, Doctor of Philosophy; S, Student.

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importance of embracing emerging technologies and therapies to shape the future of dental practice has been emphasised [3]. To ensure evidence-based health care, teachers and students must engage with research findings, by applying scientifically proven materials and methods in their practices [4, 5]. For this, dental education and teachers are important as role models for the students and consequently for fostering future professionals.

The degree project is an integral part of academic and professional education and is considered an opportunity for students to immerse themselves in a specific subject of their future profession [6]. The degree project gives students the possibility to develop an understanding of the relationship between research and their future profession. Also, it gives them tools for staying current with recent research, which ensures professional development, for instance, that the treatments recommended and performed on patients consistently align with the highest standards of care [2]. Hence, an understanding of the scientific basis for professional work is fundamental for the students in their daily clinical practice, enabling them to improve the quality of dental care [5].

The degree project aims to develop student's knowledge, skills and scientific approach. Consequently, through the process of degree project work, students acquire the ability to apply theoretical knowledge to practical situations effectively [4]. A previous study shows that the degree project effectively develops the students' capabilities of independence, self-criticism, argumentation, practical application of theory and critical awareness of alternative conceptualisations [7]. Indeed, these are capabilities and skills necessary for the students to acquire for developing professionalism and for the future profession as dentists [3, 6]. Apart from this, students get the opportunity to gain in-depth knowledge in a specific area of interest, which gives them access to specialised knowledge. It has been shown that the degree project serves as a personal, and systemic tool, which involves the development of professional knowledge, such as learning more about different patient groups, conditions and diseases, but also learning to meet patients, as well as affect work organisation and stakeholders [8].

During work on the degree project, the student is supervised. Supervision involves supporting the student in the process of planning, and execution of the degree project [9]. For this, the supervisor needs to have research skills of, for instance, knowledge of the subject for the degree project but also of methodology and theory [10, 11]. Supervision also involves adjusting the style of support in accordance with the needs of the student [12–14]. Indeed, the style of supervision can influence the student learning process and the development of the degree project in various ways, [11] which makes it an essential aspect to consider. However, this is not always obvious, but dependent on continuous communication between supervisor and student. For instance, sharing expectations on supervision in an early stage, and attentiveness throughout the work with the degree project is essential for success concerning this issue. The relationship between supervisor and student is important for the success of the degree project regarding aspects, such as quality, impact on learning, but also satisfaction levels of both parties involved [12]. The importance of supervision during the degree project has also been addressed in previous studies. In these studies,

students emphasise the need for and importance of educational support for a successful integration of academic literacy and professional literacy which the degree project entails [8, 15, 16]. Indeed, understanding how to adhere to an established academic style and support in a professional context is experienced as a particular challenge.

There are five aspects that supervisors need to take into account in order to optimise student success in undergraduate and graduate levels: the roles in supervision, power relations, emotional ties, giving feedback and group seminars [13]. Further, there is a constant interaction between the supervisor and the student on various aspects of the degree project that needs calibration and balance. Supervision involves time and resources from both the supervisor and the student. However, the key factor is quality, which helps foster the development of essential attributes that benefit an academic as well as a professional life [17].

The overall quality of a degree project or a thesis is enhanced by a collaborative feedback interaction between the supervisor and the student [18]. However, the specific type of feedback a student receives is not the sole determining factor [19]. Instead, it underscores the importance of supervisors engaging in a conversation with the student to understand the students' preferences for feedback, ultimately making it as constructive as possible [19, 20]. In addition, the students also benefit from the feedback that is received from others, such as peers, on the degree project work. This feedback makes possible discussions with argumentation, perspective change and critical readings of text [15]. No preferred style of supervision, or type of feedback—oral or written—that was generally preferred among graduate students has yet been reported. Some preferred written feedback and track changes on their drafts, whereas others favoured oral feedback [21]. This illustrates not only the importance of the degree project for the future development of the dental profession but also the complexity of the degree project itself and the supervision of this work. Therefore, it is important to identify influencing factors for the quality and success of the degree project and of supervision. So, the aim of this study was to investigate factors that influence the quality of student degree projects in the study programme in dentistry at Karolinska Institutet (KI), from a student and a supervisor perspective.

2 | Materials and Methods

2.1 | The Study Context

The study took place in the study programme in dentistry at KI, Sweden. This study programme awards a degree of Master of Science in Dental Surgery. The study programme comprises of 300 ECTS (European Credit Transfer System) credits, 5 years of full-time studies and subjects related to odontology, medicine and biomedicine, basic- and behavioural science as well as clinical training on-site at the university.

2.2 | Object of Analysis

The object of analysis in this study is the degree project at the Department of Dental Medicine at KI. The degree project

extends over two semesters and is equivalent to 30 ECTS credits that correspond to 6 months of studies (<https://education.ki.se/course-syllabus/2TL094>). The students are introduced to research ethics, literature search, statistics, scientific writing and critical research literature review through lectures, seminars and workshops.

There is a selection process regarding supervisors and projects, which starts with a day of inspiration in which teachers, that is, supervisors present their ongoing research, and the projects that are possible to enrol for a degree project. After the presentations, the students partner up in pairs and then send letters of request to join projects of interest. The supervisors' selection process seemingly has different strategies, and how students and supervisors finally combine is to observe.

At KI, a degree project follows a guide or a template available on the universities' website for the students to use. The guide provides clear instructions on the academic formalities of the degree project (<https://education.ki.se/course-syllabus/2TL094>). For supervision, there is no guide or template but is instead based on an agreement between the supervisor and the student that adheres to student needs during the process of the degree project work. The supervisors must meet specific criteria to be eligible to supervise students' degree projects, which involve having fulfilled courses in higher education pedagogy of 15 ECTS credits and having a PhD degree. These criteria ensure that supervisors have basic skills and experience of research and supervision (<https://staff.ki.se/supervisor-to-doctoral-student>).

2.2.1 | Semi-Structured Interviews With Supervisors

Semi-structured interviews were performed with eight supervisors in the dental programme at KI. They were matched in age, sex and experience and represented diverse specialties at KI, in order to cover the majority of the subjects. The eight supervisors were four men and four women between the ages of 44 and 68, with 10–25 years of experience, and represented four different odontological specialties, which are not specified here to preserve anonymity.

The semi-structured interviews were conducted either at the Department of Dental Medicine, KI or digitally via Zoom (Zoom Video Communications, Zoom Inc., San Jose, CA, USA). More specifically, five interviews were performed at KI, and three interviews digitally. To ensure consistency, supervisors were not given the interview questions in advance. Two researchers conducted the interviews, and the interview questions were distributed among these (Appendix 1).

The questions for the semi-structured interviews were formulated by all researchers in this study. The questions concerned background information as teachers and supervisors, information on the practice of supervision and aspects concerning the degree project. Semi-structured interviews make possible a direction of the interviews in relation to the aim of the study, but also an in-depth elaboration and exploration of the subject-matter despite any possible limitations by the questions [22, 23]. A test interview was performed with a supervisor who was not

included in the study, which helped calibrate the interview questions resulting in minor adjustments in relation to the aim of the study.

The interviews were audio-recorded with the consent of the interviewees. These audio clips were transcribed verbatim. To protect anonymity, the transcripts refrained from including any names. Since this study primarily concerns spoken content, the transcription has not included non-verbal elements of the conversation. Each of the authors transcribed four interviews. This approach might introduce discrepancies in the transcriptions. However, each author independently reviewed all the texts to ensure accuracy.

2.2.2 | Analysis of the Semi-Structured Interviews

The transcriptions were divided into two parts. The first part addresses the background information of the supervisors and was summarised and narratively described in relation to each question. The second part involves supervision and quality, which was analysed with thematic analysis.

Thematic analysis enables the identification of patterns in data and includes a rich description and a minimal organisation of data [24–27]. In this study, transcriptions from eight semi-structured interviews (159 p; 6 h, 17 min, 22 s) with supervisors were subject to thematic analysis. Drawing from the transcriptions from the supervisors, themes pertinent to the collected data were formulated. These themes directly correspond to the research inquiry of the study and emerged through a rigorous, comprehensive coding process that encompassed the interpretation of raw data rather than mere restatement or description. Each theme has been meticulously expounded upon, providing a nuanced depiction. Thus, the thematic analysis procedure entailed the identification of meaningful patterns and potentially significant issues within the data.

The analytical sequence conducted concerning the transcriptions and written answers unfolded as outlined by Braun and Clarke (2021, p. 331) [27]: (1) familiarisation of data and familiarisation notes; (2) systematic data coding for each supervisor according to the analytical question: *What factors influence the quality of student degree projects?* (3) generation of initial themes from coded and collated data; (4) review and development of themes in relation to the research question and to the whole data set; (5) refinement, definition and naming of themes and (6) writing the report and complementing the themes with extract examples from data. Finally, three themes were found in the interview data.

2.2.3 | Questionnaire With Dental Students

An anonymous questionnaire was distributed to dental students, either in the initiation stage of a degree project or in an ongoing degree project, at the dental programme at KI. The students were in their 7th and in their 9th semester of the programme. At the time of the data collection, there were 79 students enrolled in the 7th semester, and 71 students enrolled in the 9th semester.

The questions were formulated by all researchers and were related to the questions posed to supervisors in the semi-structured interviews (Appendix 2). The questionnaire consisted of 10 questions in multiple-choice format as well as free-text responses. The questions concerned the decision-making processes of students when selecting a topic for their degree project, selecting their writing partner and their supervisor, as well as factors influencing these decisions. The questions and their response options are shown in Table 1. Study data for the questionnaire were collected and managed using the KI Survey (Artologik Survey&Report, Växjö, Sweden) electronic data capture tool hosted at KI.

2.2.4 | Analysis of Student Responses in the Questionnaire

The responses to the questionnaire were summarised and narratively described in relation to each question of the questionnaire, to the entire group of students and also to sex. The summary of the questionnaire is displayed in Table 1.

A normality test of the data was performed with Shapiro-Wilk's test and since data were not normally distributed a Mann-Whitney *U*-test was used to assess possible sex differences.

3 | Results

3.1 | Interviews With Supervisors

Generally, all supervisors (100%) are involved in teaching in the dentist programme. This is in courses during various semesters and levels of the programme. Also, all supervisors (100%) have either been or are currently involved in other responsibilities at KI and externally in addition to their role as teachers and supervisors. These include, for instance, the head of the department, research team leaders, members of the programme council, and committees, etc. There were no sex differences concerning teaching or involvement in other responsibilities.

The requirements for pedagogical education to supervise degree projects are met by all supervisors (100%), with no sex differences. The university credits they hold in higher pedagogical education range from 10 to 30 credits. More specifically, 25% (only men) had 10 ECTS credits, 38% had 11–30 ECTS credits, and 28% had 38 ECT credits. The two latter had an equal sex distribution. All supervisors had a doctoral degree and were specialised in a particular area of expertise.

The supervisors had at least 10 years of teaching experience (25% in the entire group of supervisors, 50% men), and as most 40 years of experience (25% in the entire group of supervisors, 50% women). However, 50% of the supervisors had 20–30 years' experience in teaching, with an equal sex distribution (40% men, 40% women). Sixty-three per cent of the supervisors had supervised over 20 degree projects (63%), whereas 38% had supervised less than 20° projects. There was no sex difference in the distribution of supervised degree projects.

TABLE 1 | Summary of student responses (45 students—35 women; 10 men) from a questionnaire on factors associated with the degree project in odontology (30 ECTS—advanced level) presented in number of respondents (*n*=) and percentage of responses (%).

Question	All <i>n</i> = (%)	Women <i>n</i> = (%)	Men <i>n</i> = (%)
Previous experience of being supervised, that is, writing a degree project in other higher education			
Have previous experience	6 (13)	4 (11)	2 (20)
Three most important factors for the selection of degree project			
Interesting subject/topic	38 (84)	32 (91)	6 (60)
Supervisor	34 (76)	30 (86)	4 (40)
Meritorious purposes	13 (29)	8 (23)	5 (50)
Writing partner	20 (44)	16 (46)	4 (40)
Publication possibility	12 (27)	8 (23)	4 (40)
In-depth study of subject/topic	9 (20)	5 (14)	4 (40)
Goes fast	7 (16)	4 (11)	3 (30)
Other—contribute to future professional knowledge	1 (2)	1 (3)	0 (0)
What characterises a degree project of high quality			
Good structure	29 (64)	23 (66)	6 (60)
Scientifically sound/grounded	19 (42)	16 (46)	3 (30)
Proper academic/scientific language	19 (42)	15 (43)	4 (40)
Interesting and well-defined subject/topic	18 (40)	13 (37)	5 (50)
Other—good supervision	2 (4)	2 (6)	0 (0)
What qualities of a supervisor are important			
Pedagogical, supportive, present	39 (87)	30 (86)	9 (90)
Good communicative skills, dedicated/engaged	29 (64)	23 (66)	6 (60)
Quick responses to queries, accessible	24 (53)	19 (54)	5 (50)
Experienced in supervision, experienced researcher	10 (22)	6 (17)	4 (40)
What criteria are important when choosing a supervisor			

(Continues)

TABLE 1 | (Continued)

Question	All <i>n</i> = (%)	Women <i>n</i> = (%)	Men <i>n</i> = (%)
Good communicative skills, attentive, dedicated/engaged	32 (71)	26 (74)	6 (60)
Experienced in supervision, guiding, structured, supportive	31 (69)	26 (74)	5 (50)
Quick responses to queries, accessible	23 (51)	19 (54)	4 (40)
Experienced researcher, subject/topic expert	18 (40)	15 (43)	3 (30)
How students believe their supervisors would describe them			
Inquisitive, committed, resourceful, motivated	26 (58)	23 (66)	3 (30)
Ambitious, meticulous, reliable, efficient	25 (56)	19 (54)	6 (60)
Seeking for guidance, feedback and support	12 (27)	11 (31)	1 (10)
Independent, self-reliant	8 (18)	4 (11)	4 (40)
Other—nice/friendly, time-optimist, mediocre	6 (13)	3 (9)	3 (30)
Expectations on supervisor			
Clear instructions and clear guidance	45 (100)	35 (100)	10 (100)
Present, engaged, accessible, understanding, supportive	19 (42)	15 (54)	4 (40)
Quick and thoughtful responses, good communication	19 (42)	17 (49)	2 (20)
Subject/topic expert sharing their knowledge	6 (13)	5 (14)	1 (10)
What criteria are important when choosing a writing partner			
Cooperative, easy to communicate with, accessible	38 (84)	28 (80)	9 (90)
Similar/same ambition, goals, and level	24 (53)	19 (54)	5 (50)
Responsible, participative, willingness to work	17 (38)	13 (37)	4 (40)

(Continues)

TABLE 1 | (Continued)

Question	All <i>n</i> = (%)	Women <i>n</i> = (%)	Men <i>n</i> = (%)
Expectations on writing partner			
Responsible, participative, willingness to work, equal workload	30 (67)	23 (66)	7 (70)
Cooperative, easy to communicate with, accessible	27 (60)	21 (60)	6 (60)
Similar/same ambition, goals, and level	26 (58)	19 (54)	6 (60)

Note: Bold text indicates significant difference between sexes (Mann–Whitney *U* test; $p < 0.05$).

Abbreviation: ECTS, European credit transfer system.

All supervisors (100%) have experience of supervision concerning degree projects on basic level and master level. Eighty-eight per cent of the supervisors, with no sex difference, had experience in supervising PhD-theses.

Sixty-three per cent of the supervisors were responsible for one-to-two-degree projects annually. One supervisor (13%) was responsible for three-to-four-degree projects annually, whereas another (13%) was responsible for more than four projects annually. Men are responsible for supervising more degree projects, compared to women.

There was an equal distribution regarding publishing degree projects, with 36.7% having more than five publications, 36.7% having more than two, and 36.7% had at least one. However, there were no sex difference to this area of query.

3.2 | Themes From the Interviews With Supervisors

The thematic analysis resulted in three themes that are presented below.

3.2.1 | Theme 1—The Approach to Supervision

This theme highlights the reasons for choosing a degree project, the approach to supervision and the challenges that supervisors experience during a degree project.

The supervisors choose a degree project that is realistic and feasible. This means that there are prerequisites to complete the project, especially considering the time frame given for this. Another important factor for the choice of degree project is the scientific relevance, that is, that it contributes to a knowledge gap, and to the development of the profession. The supervisors also tend to choose projects after interest and in accordance with their research line and specialty.

Woman 1: It must be feasible, then. I say this, many times individuals come and have very, very good ideas. Really, but it's not realistic, unfortunately. Because, firstly, we don't have the patient types, secondly, we do not have the financial resources, and thirdly, it takes too long time.

Man 1: So, I make sure that the projects are really feasible, that's the most important thing. It has to be realistic.

Supervision is described as guiding. This means that students receive feedback that motivates them to develop a greater degree of independence. This initially requires a high degree of hands-on and concrete guidance in the practical part of the work of the degree project. It also requires guidance in scientific writing, which includes structure and language. Thus, this guidance is part of a student-centred approach where the student is expected to be a driving force and contribute to the work. This form of supervision is the same regardless of the level of the project (undergraduate > Master of Science > Doctorate) but is adapted to the student's level of education with increasing demands for independence.

Woman 4: Yes, I think I do [have the same supervision style], and then it is clear that I have higher demands if you [the student] are at a higher level.

Man 3: I have the same supervision style, but the requirements vary depending on the [educational] level of the student.

Man 4: I put a lot of responsibility on the student. It is their work, not my work.

There are, however, a number of challenges in supervision and these relate to the fact that the undergraduate students are time optimists and find it difficult to plan and structure their time for the different parts of the degree project work. This makes it difficult for them to meet deadlines. Also, during the course of the work, the students can lose motivation and interest. This makes the counselling approach of supervision with continuous support, motivation and encouragement extra important.

Woman 2: I think the biggest challenge was to get them to, sort of, juggle time.

Woman 4: I think that many times it's been about the fact that you [the students] kind of think that you [the students] have to do so much more yourself, so that you [the students] don't come and ask for supervision until they [the students] have about three days left, and, well, I've been in that situation quite a few times, even though I think I've tried really hard to get in touch. I want to see the result when you have written this because it is better that I come in early with my comments if it is going in the wrong direction and then you [the students] do not do it anyway. And then it is not fun, because then I sit there two nights before and have to work like crazy on a degree project that I could have done so much better with, earlier.

Man 1: Sometimes I can re-formulate a paragraph for them, with the track-changes function. In that way I can

show how you [the students] should do. Or I can show similar studies that I think are good, encourage you [the students] to look at the discussions, and to see the structure. The hands-on supervision depends on how much I want to challenge the students.

Man 4: I guide as much as I can guide, I help, I support.

3.2.2 | Theme 2—Identified Characteristics That Contribute to a Qualitative Degree Project

The supervisors described themselves as committed to the degree project work, available and present during the process of the degree project for the students, for instance, by replying quickly to student questions. Also, they described themselves as guiding, clear towards the students and encouraging. When it came to the actual work with reading and giving feedback on the text of the degree project, the supervisors thought that they were structured and organised.

Woman 4: I always have meetings when the students want. I always make myself available and I think that is what a student needs. A supervisor who is present and who really tries to explain it, and that is what I do.

Man 1: For example, when I get a text, I go in and adjust it, but with "track changes"-function, so that you [the students] can see how I change it. I always use the student's text as a starting point, so I do not change the content, just provide guidance on how to write, how to think, and how to organize. Maybe I am a bit picky. Also, that I give feedback quickly so that it does not take too long time, does not stop the process. I also take the time needed when needed [by the students].

The supervisors believed that the students would describe them as accurate, meticulous, motivating, approachable, accessible, structured and organised. These qualities were in line with how the supervisors described themselves, which implies that they think that students perceive them the same way.

Woman 3: I think you [the students] think that I am strict and fussy, I would say. But I think they also appreciate the accessibility of being able to get hold of me. They [the students] usually say when they are done that, they thank me for responding so quickly and taking so much time. Perhaps I also spend too much time on supervision.

Woman 1: Strict, cheerful, courteous, committed, interested.

Man 2: For me, it is like I want to encourage them to continue. Then I answer [to student queries] quickly. Yes, I do.

A degree project work should, according to supervisors, be feasible, have a good structure and language in accordance with scientific requirements and an elaborate type of text which also includes students' argumentation and reasoning. The degree project work should be within the supervisors' area of interest

and expertise. It should also be interesting from a student perspective to make them motivated and committed to completing the degree project. Students' commitment is, by supervisors, perceived as a contributing factor to the quality of a degree project. Other factors that influence the quality of a degree project are a good structure and design that makes the degree project feasible. In addition, there should be a common thread throughout the degree project text, with correct scientific language, and in which students can demonstrate their own reasoning skills. Finally, a complete degree project, that is publishable indicates high quality.

Woman 1: Language and structure. This is what characterizes high-quality work.

Woman 3: There are almost the same requirements for a degree project as for an article to be published because the idea of our degree projects is often to make them publishable.

Man 1: The most important factor is the structure of the project from the beginning, its feasibility, the existence of a question that can be answered. A clear language that makes the text easy to read.

Man 4: Good language. And then how the project is done, the structure, the design of the project, so to speak material and method, how it is set up and what statistics have been used so that you can see that it is a project that has been feasible in a good way. [...] The degree project is at a level where you [the supervisor] still feel that it gives something to the department that is responsible for the project, but also that it gives something to the students.

3.2.3 | Theme 3—Choices and Challenges of a Degree Project

The supervisors think that supervision of undergraduate students in their degree project is fun, stimulating and contributes to the development of the supervisor as well as the student. When choosing projects to supervise, the supervisors base their decision on whether degree projects are fun, interesting and are potential publications. This is because publications are an academic merit for both supervisors and students. The latter may use the merit for a plausible future academic career.

Woman 1: I like it [to supervise], and particularly when they [the students] are so enthusiastic as well, and you got somebody who is really, really interested in what they are doing.

Man 1: If the student is keen to have a publication, then I try to challenge them a little more. So that the students get that merit, which is very important for their future.

The choice of students to supervise is made in relation to students shown interest in the subject for the degree project, motivation, but also personal chemistry between the supervisors and the students.

Woman 2: They have to show their motivation. That they are really interested in doing this [...]. And then you can see how well you interact as well, and I think that is quite important.

Man 1: The students have to be interested in the subject, and it has usually been the case that they have been able to show that interest for a long time, by coming to ask questions, discussing and making their own suggestions. I think that the student should still make sure that they fit with me as a supervisor. Because that role is just as important as how good the work is or how good the student is, you feel that you can communicate.

However, there are practical issues with supervision. For instance, it is time-demanding and requires engaged participation from both the supervisor and the student. This emphasises the degree project as a collaboration between the supervisor, an experienced expert and the student, which is often but not always a novice within scientific writing. When facing challenges, supervisors give students additional support and encouragement. Supervisors then work even more hands-on, which includes giving the student more time to discuss their degree project work with the supervisor, but also provide suggestions to solutions.

Woman 4: But I think I am very committed to it [supervision], partly because I think the subject is so incredibly fun, and that I think all the ideas that the students come up with are fun to work with. I try to get the students to contact me regularly so I can guide them a little at a time. Then it's not like I sit and do the work, I don't do that, but I really try to get across why you should do this or that and I always have meetings when the students want to, I always make myself available and I think that's what a student needs. So, I am a supervisor who is present and who really tries to explain. I would never abandon a student, never ever. That's why I think I'm a good tutor. Because I have such high demands on myself as well.

Man 3: Then I usually bring them in [to a meeting]. You have to kind of try to encourage them and ask them ok where are you stuck? [...] Sometimes they are a bit [lost], they don't know what to do, what to start with and so on, so you try to guide them. Ok, [you encourage them to] start writing, write material and method now, because now you know what you have done. Get it down [in writing], the introduction, it's just, it's just writing, you know what you have, like the reverse... you've already done it on the mid-term report. Just fine-tune it. Just write everything down. It can be kind of messy, it is alright, just get everything down on a piece of paper and then we can start sorting out [...] and try to kind of create structure, and then when this is done, we can meet again and discuss.

3.3 | Student Responses to the Questionnaire

A total of 45 students (out of 150; 30%)—35 women and 10 men—voluntarily responded to the questionnaire. Six out of 45

students (13%) responded that they have previous experience writing a degree project and being supervised. This means that most of the students do not have any previous experience, and there were no sex differences between women and men.

The three most important factors for the selection of a degree project concerned specific interest in the subject/topic (38%) of the degree project, the supervisor (34%) and the writing partner (20%). Women tend to value the interest in the subject/topic (32 out of 35, 91%) and the supervisor (30 out of 35, 86%) to a significantly higher degree ($p < 0.05$) than men do—subject/topic was rated as important by 6 out of 10 (60%) and supervisor by 4 out of 10 (40%).

Students answered that a degree project with high quality is characterised by a good structure (29%), being scientifically sound (19%) and writing in accordance with academic requirements of language (19%). In the following excerpt student number 19 (S19) described that the high quality of a degree project is characterised by a '[w]ell thought-out structure with a common thread and link between intro and discussion, academic and scientific English, clear tables/figures, credible sources, clear conclusion'. There were no sex differences concerning what characterises a degree project with high quality.

The students emphasise that important qualities of a supervisor are pedagogical skills, supportiveness and presence during work with the degree project (39%). Also, students value supervisors who have good communication skills and high dedication/engagement (29%) but also who are easily accessible and respond quickly to queries (24%). This was also highlighted in the following excerpt: 'I believe that communication between supervisors and students is the most important thing. And that you get support throughout the work when questions arise. Available supervisor for various questions' (S41). There were no sex differences concerning this question.

When choosing a supervisor, the students' criteria involve a supervisor with good communication skills, attentiveness, dedication and engagement (32%). A student described this as '[s]omeone who is passionate about their subject and about learning and understanding us students' (S4). Also, student criteria include a supervisor with experience in supervision, that is guiding, structured and supportive (31%). Students also appreciate quick responses to queries and accessibility during work with the degree project (23%). There were no sex differences concerning this area of query.

Students believe that their supervisors would describe them not only as interested, committed, resourceful and motivated (26%) but also as ambitious, meticulous, reliable and efficient (25%). In addition, students believe that supervisors describe them as individuals who seek guidance, feedback and support (12%). For this question, no sex differences were shown.

Student expectations on supervisors are clear instructions and clear guidance (100%). This was also expressed by a student as follows: 'That I get clear feedback to improve the quality of the work. I don't want a supervisor who gives a pass just to be nice, you learn for life' (S11). Also, students expect that supervisors are present, engaged, accessible, understanding

and supportive (19%). Students also value supervisors who provide quick and thoughtful responses and maintain good communication (19%). This is reflected in the following student response: 'I expect the supervisor to help me with a large and challenging task. Taking their time with feedback and understand that this is the first time for us working on such a substantial project' (S29). There were no sex differences in student expectations of supervisors.

Students point out that critical criteria when choosing a writing partner are that the partner is cooperative, easy to communicate with and accessible (38%). Also important is that their writing partner has similar ambitions with the degree project, goals and level of commitment (24%). Finally, they value having a writing partner that is responsible, participative and willing to work (17%). A student expresses the critical criteria in terms of '[t]hat you have a similar vision, are willing to spend as much time as you do and that it is possible to have an open dialogue and communication' (S22). When it comes to critical criteria for the selection of a writing partner, there were no sex differences.

Students' expectations on a writing partner include being responsible, participative, having a willingness to work and being careful of an equal workload (30%). The latter is clearly described by a student: 'That the work should be divided roughly equally, to come at set times and that it should be possible to cooperate' (S21). Students also expect a writing partner who is cooperative, easy to communicate with and accessible (27%), in addition to having similar or same ambitions, goals and level of commitment (26%). For this question area, there were no sex differences.

4 | Discussion

The main findings of this study indicate that supervisors and students have similar expectations and perspectives regarding the degree project. This involves the supervisor role, the student role, but also the structure of supervision. Also, they describe the degree project work in the same way concerning academic requirements and quality. They agree that the degree project must be realistic, feasible, structured and in line with academic requirements. These were also factors that ensured a qualitative degree project. In addition to this, the supervisors described quality also in terms of a publishable text. Further, the findings showed that the supervisor should be present, answer swiftly to student queries and support the students in time-planning. On the other hand, the students should show motivation, interest and an increasing degree of independence during the degree project. These expectations are also put on the student's writing partner by students themselves, so they seem self-evident. Both supervisors and students expressed that the degree project should be fun, within the area of the supervisors' expertise and student interest, contribute to the development of the profession, and preferably lead to a publication for academic merit.

However, the interviews with supervisors also highlight challenges with the degree project, which the student questionnaire does not make possible. Supervisors experience challenges such as a decrease or lack of motivation and poor time management.

In relation to these, the supervisors clarify and further describe the pedagogical strategies that they use to solve challenges with the degree project. These include increased support where they help students manage the production of the degree project in relation to time by a stepwise supervision with subgoals. One aspect that was raised by the supervisors, but not the students, was the importance of the selection of relevant statistical analyses that were suitable not only for the project but also for the students to perform. According to the supervisors, this also helps stimulate students' motivation with finishing the degree project. Despite the degree project being the students' education and responsibility, which is also highlighted by the supervisors in their interviews, supervisors express that they support students so that they can complete and achieve the learning outcomes. This emphasises a genuine engagement by the supervisors in students' degree projects. This is in contrast with another study that included an online survey with undergraduate medical students on expectations on the student-supervisor relationship [28]. In that study, the results pointed out students perceive the responsibility of the project to be equally shared between the student and the supervisor. Senior students, that is, students in their second year of the programme, have higher expectations on supervisors compared to junior researchers in their first year of the programme. This indicates that there is a difference in the attitude towards responsibility and work between supervisors and students depending on the level of education, and thus the understanding of the research process. The more satisfaction the greater reliance to the supervisor for guidance, which applies to the junior students, while with time student reliance to the supervisor decreases and with that the level of satisfaction—which is valid for the senior students [28]. This may depend on a development of student needs and requirements of supervision that are not successfully met by the supervisor [29, 30]. Indeed, this stresses the need to discuss expectations on supervisors, students and supervision already in the beginning of the degree project, and then continuously during the work so that adequate adjustments can be made according to student needs.

The clarification of the meaningfulness of the degree project in relation to the profession is an important part of supervision, which is in turn linked to student motivation. When student motivation decreases it affects the production and quality of the degree project. The aspects of meaningfulness and motivation are also addressed in other studies [8, 16]. They highlight, although from slightly different viewpoints, that the link of the degree project to the scientific ground of the profession enables the students to increase the experience of meaningfulness and motivation and to use it as an opportunity to develop professional knowledge. Also, as highlighted by the interviewed supervisors in this and other studies, the potential of publishing the degree work for academic merits can also be a motivational point, enabling the students to increase the learning gains with the degree project, but also connect classroom learning to the real-world professional context [31]. However, important to keep in mind is that publishing is additional to the learning goals of the degree project in the context of this study, and whether it affects meaningfulness and student motivation depends on the supervisors' ambition to foster academic and professional development in the timeframe given for the degree project, as well as on students' future career goals [32].

The degree project is, in this study, proven to be a collaboration between supervisors and students but also between students. Turning the attention to the latter relation, it is also an important factor that influences the degree project, in terms of production and quality. According to the student questionnaire, when students choose a writing partner, they value a partner who is cooperative, easy to communicate with and accessible, but also someone who has similar ambitions is responsible, participative and willing to work. This means that students choose a partner that is similar to how they perceive themselves and in hope of a frictionless collaboration. This partnership is also addressed in the supervisors' interviews that indicate that the relationship between the students of a degree project can affect the kind of supervision that is given, as it is not only focused on the completion of the degree project but also on resolving conflicts between the students. In a study by Hussein (2021), where reflections from students enrolled in project-based learning assignments in engineering education were analysed, results showed that collaborative challenges concerned schedules, priorities and uncertainty [33]. The same study identified a structural dimension and a people dimension that need to be considered for a successful collaboration [33]. The structural dimension involves the adoption of a time-management structure, that is, carefulness in the planning of the project, follow-ups and communication, while the people dimension includes student awareness of the need of adaptation and flexibility, which recognises that the students themselves directly affect the outcome of the project. Thus, this and previous studies brings to attention the importance of inclusion, openness, support, trust and commitment during a project—here the degree project—which can help students manage emerging problems and disagreements when collaborating [33, 34]. Specifically, trust is a key factor already at the beginning of the degree project work because it opens up an exchange of knowledge, and interdependency, and thus increases work efficiency [34]. Otherwise, the idea with student collaboration, which in this case is in pairs, is to provide a milieu of support and accountability that can promote work with the degree project [35].

In this study, students described their expectations of supervisors which among others engagement, availability and supportiveness. Also, supervisors appreciated that students valued their thoroughness, structure, organisation and motivational abilities. These findings are in line with another study that has set 10 practices as contributing to successful supervision [35]. These 10 include, for instance, a structured project, clear expectations on students, teaching students the skills, methods and techniques needed for the project, providing emotional support and dedicating time for supervision. This also means that supervision should be adjusted to the needs of the students, which can shift during the work with the degree project, as indicated both from the present and previous studies [36, 37]. For instance, teaching students skills, methods and techniques they have never used before and need in order to complete the degree project is a responsibility of the supervisors [38]. This requires occasionally a more hands-on approach in supervision. Also, encouragement is shown to be critical for students' success in their work [39], which is here attended to as the supervisor's ability to motivate students, which can be in the form of clear instruction, timely feedback and relevance.

5 | Conclusions

Taken together, supervisors and students share grounds for the degree project work, which is an important condition for ensuring a qualitatively sound degree project. Knowledge concerning these common grounds can help strengthen the collaboration between supervisors and students during the degree project. For this, sharing expectations and perspectives in the beginning and having a continuously open dialogue concerning this issue during the degree project work benefits a sustainable collaboration and ensures quality. To achieve this, supervisors need to choose students who are interested and motivated and a degree project that is in their area of expertise, is feasible and structured. Supervisors also need to give students support with time-planning and to be attentive, for instance, by responding swiftly to any student queries.

Author Contributions

M.C. and N.C. had the main idea for the article. M.C., Z.S. and N.C. contributed to the study conception and design. Data analysis and curation were mainly performed by P.W. and L.Ä., with guidance from Z.S. and N.C. Thematic analysis was performed by M.C. and N.C. The manuscript was drafted and critically revised by all authors.

Ethics Statement

The project was approved by the Swedish Ethical Review Authority (Dnr: 2022-04816-01). All participants were informed about the study, and informed consent was retrieved prior to inclusion. For supervisors before the interview at the time when the date for the interview was booked. For the students responding to the questionnaire, they were informed that the questionnaire should be distributed, that responding is voluntary and that by responding to the questionnaire informed consent is given to analyse the data from the anonymous questionnaire. In addition, to preserve anonymity during interviews no names were mentioned, the questionnaire was completely anonymous, and no personal data could be retrieved. This allows data from the interviews and questionnaires to be used for research purposes and for means of quality assessments and improvements in education. This also means that there was no risk of harming any participant or spreading any information concerning any specific participant. To clarify, data only comprised of transcriptions from the interviews and responses to the questions in the questionnaire. Thus, the risk was very low in relation to what could be gained, which was providing knowledge and feedback to curriculum work concerning degree projects in professional higher education in dentistry.

Consent

The authors have nothing to report.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The raw material is available from the corresponding author upon reasonable request.

References

1. B. Declaration, "Bologna Process, European Higher Education Area," accessed April 8, 2024, <http://eha.info/page-ministerial-declarations-and-communicues>.

2. M. Feinberg, L. T. Garcia, P. J. Polverini, C. H. Fox, and R. W. Valachovic, "The Vital Role of Research Funding in Preserving the Oral Health of the Public and the Dental Profession," *Journal of the American Dental Association* (1939) 146, no. 6 (2015): 355–356, <https://doi.org/10.1016/j.adaj.2015.03.022>.
3. L. R. Amir, S. A. Soekanto, V. Julia, N. A. Wahono, and D. A. Maharani, "Impact of Undergraduate Research as a Compulsory Course in the Dentistry Study Program Universitas Indonesia," *Dental Journal* 10, no. 11 (2022): 204.
4. J. J. Emrick and A. Gullard, "Integrating Research Into Dental Student Training: A Global Necessity," *Journal of Dental Research* 92, no. 12 (2013): 1053–1055, <https://doi.org/10.1177/0022034513508557>.
5. A. M. Iacopino, "The Influence of "New Science" on Dental Education: Current Concepts, Trends, and Models for the Future," *Journal of Dental Education* 71, no. 4 (2007): 450–462.
6. M. Fontana, C. González-Cabezas, T. de Peralta, and D. C. Johnsen, "Dental Education Required for the Changing Health Care Environment," *Journal of Dental Education* 81, no. 8 (2017): eS153–eS161.
7. M. J. Atkins and M. Redley, "The Assurance of Standards at Masters Level: An Empirical Investigation," *Higher Education Quarterly* 52, no. 4 (1998): 378–393.
8. A. Henttonen, M. Westerbotn, M. Scheja, B. Fossum, and M. Teräs, "Exploring Writing a Bachelor's Thesis as a Tool for Students' Learning in Nursing: A Qualitative Interview Study From an Activity Theoretical Perspective," *Nordic Journal of Nursing Research* 43, no. 2 (2023): 20571585231167656.
9. A. Engström, "Ett handledarperspektiv på relationen mellan handledare och student," *Journal of Teaching and Learning in Higher Education* 3, no. 2 (2022), <https://doi.org/10.24834/jotl.3.2.748>.
10. J. Drennan and M. Clarke, "Coursework Master's Programmes: The Student's Experience of Research and Research Supervision," *Studies in Higher Education* 34, no. 5 (2009): 483–500.
11. L. Holmberg, "Coach, Consultant or Mother: Supervisors' Views on Quality in the Supervision of Bachelor Theses," *Quality in Higher Education* 12, no. 2 (2006): 207–216.
12. R. A. de Kleijn, M. T. Mainhard, P. C. Meijer, A. Pilot, and M. Brekelmans, "Master's Thesis Supervision: Relations Between Perceptions of the Supervisor–Student Relationship, Final Grade, Perceived Supervisor Contribution to Learning and Student Satisfaction," *Studies in Higher Education* 37, no. 8 (2012): 925–939.
13. M. V. Anderlini, "Handledning: en mångfacetterad arbetsallians," *Journal of Teaching and Learning in Higher Education* 3, no. 2 (2022), <https://doi.org/10.24834/jotl.3.2.766>.
14. L. D. Roberts and K. Seaman, "Good Undergraduate Dissertation Supervision: Perspectives of Supervisors and Dissertation Coordinators," *International Journal for Academic Development* 23, no. 1 (2018): 28–40.
15. A. Henttonen, K. Ahlberg, M. Scheja, B. Fossum, and M. Westerbotn, "Students' Ways of Experiencing Writing a Bachelor's Thesis: A Phenomenographic Interview Study," *Higher Education Research and Development* 42, no. 7 (2023): 1640–1653.
16. D. Whitehead, "The Academic Writing Experiences of a Group of Student Nurses: A Phenomenological Study," *Journal of Advanced Nursing* 38, no. 5 (2002): 498–506, <https://doi.org/10.1046/j.1365-2648.2002.02211.x>.
17. C. Franzén and G. Brown, "Undergraduate Degree Projects in the Swedish Dental Schools: A Documentary Analysis," *European Journal of Dental Education* 17, no. 2 (2013): 122–126.
18. K. Celik, "The Contribution of Supervisors to Doctoral Students in Doctoral Education: A Qualitative Study," *Creative Education* 4, no. 1 (2013): 9.

19. D. Carless, "Differing Perceptions in the Feedback Process," *Studies in Higher Education* 31, no. 2 (2006): 219–233.
20. S. Jiang and X. Yan, "Research on the Effect of Supervisor Feedback for Undergraduate Thesis Writing," *English Language Teaching* 13, no. 1 (2020): 43–50.
21. O. Odena and H. Burgess, "How Doctoral Students and Graduates Describe Facilitating Experiences and Strategies for Their Thesis Writing Learning Process: A Qualitative Approach," *Studies in Higher Education* 42, no. 3 (2017): 572–590.
22. L. Cohen, L. Manion, and K. Morrison, *Research Methods in Education*, 7th ed. (Oxford, UK: Taylor & Francis, 2013).
23. J. Miles and P. Gilbert, *A Handbook of Research Methods for Clinical and Health Psychology* (New York: Oxford University Press, 2005).
24. R. E. Boyatzis, *Transforming Qualitative Information: Thematic Analysis and Code Development* (New York: Sage, 1998).
25. V. Braun, V. Clarke, S. Anderson, et al., *Thematic Analysis: A Practical Guide* (New York: SAGE Publications, 2021), 376.
26. V. Braun and V. Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101, <https://doi.org/10.1191/1478088706qp0630a>.
27. V. Braun and V. Clarke, "One Size Fits All? What Counts as Quality Practice in (Reflexive) Thematic Analysis?," *Qualitative Research in Psychology* 18, no. 3 (2021): 328–352.
28. A. Althubaiti and S. M. Althubaiti, "Medical Research: What to Expect in a Student-Supervisor Relationship," *BMC Medical Education* 22, no. 1 (2022): 774, <https://doi.org/10.1186/s12909-022-03851-4>.
29. B. T. Agricola, F. J. Prins, M. F. van der Schaaf, and J. van Tartwijk, "Supervisor and Student Perspectives on Undergraduate Thesis Supervision in Higher Education," *Scandinavian Journal of Educational Research* 65, no. 5 (2021): 877–897.
30. M. W. C. Vereijken, R. M. van der Rijst, J. H. van Driel, and F. W. Dekker, "Student Learning Outcomes, Perceptions and Beliefs in the Context of Strengthening Research Integration Into the First Year of Medical School," *Advances in Health Sciences Education: Theory and Practice* 23, no. 2 (2018): 371–385, <https://doi.org/10.1007/s10459-017-9803-0>.
31. R. J. Palmer, A. N. Hunt, M. Neal, and B. Wuetherick, "Mentoring, Undergraduate Research, and Identity Development: A Conceptual Review and Research Agenda," *Mentoring & Tutoring: Partnership in Learning* 23, no. 5 (2015): 411–426.
32. S. K. Adams, "Empowering and Motivating Undergraduate Students Through the Process of Developing Publishable Research," *Frontiers in Psychology* 10 (2019): 1007, <https://doi.org/10.3389/fpsyg.2019.01007>.
33. B. Hussein, "Addressing Collaboration Challenges in Project-Based Learning: The Student's Perspective," *Education in Science* 11, no. 8 (2021): 434.
34. M. Ghazinejad, B. A. Hussein, and Y. J.-T. Zidane, "Impact of Trust, Commitment, and Openness on Research Project Performance: Case Study in a Research Institute," *Social Science* 7, no. 2 (2018): 22.
35. J. O. Shanahan, E. Ackley-Holbrook, E. Hall, K. Stewart, and H. Walkington, "Ten Salient Practices of Undergraduate Research Mentors: A Review of the Literature," *Mentoring & Tutoring: Partnership in Learning* 23, no. 5 (2015): 359–376.
36. R. T. Brown, B. P. Daly, and F. T. Leong, "Mentoring in Research: A Developmental Approach," *Professional Psychology Research and Practice* 40, no. 3 (2009): 306.
37. M. Malachowski, "The Mentoring Role in Undergraduate Research Projects," *CUR Quarterly* 12 (1996): 91–94.
38. E. Benson, "Learning by Doing: Four Keys to Fostering Undergraduate Research in Your Laboratory," *Monitor on Psychology* 33, no. 11 (2002): 42–44.

39. O. A. Sogunro, "Motivating Factors for Adult Learners in Higher Education," *International Journal of Higher Education* 4, no. 1 (2015): 22–37.

Appendix 1

Original version in Swedish

Syftet med denna undersökning är att utforska vilka faktorer som påverkar kvaliteten på examensarbeten utifrån både studenters och handledares perspektiv. Genom att identifiera (och analysera) dessa faktorer vill vi bidra till en bättre förståelse av vad som krävs för att genomföra högkvalitativa examensarbeten.

Intervjuguide—handledare på tandläkarutbildningen

Bakgrund

1. Vilka ämnen och kurser undervisar du i, eller är på något annat sätt involverad i som lärare och handledare?
2. Utöver din undervisning och handledning, har du övriga uppdrag som du är involverad i? (Uppdrag kan t ex vara medlem i betygsnämnd, sakkunniggranskare etc)
3. Har du någon pedagogisk utbildning, t ex högskolepedagogisk, handledarutbildning, eller övrig pedagogisk utbildning?
4. Vad har du för erfarenhet av att undervisa? (Följdfråga: Hur länge och hur mycket har du undervisat?)
5. Vad har du för erfarenhet av att handleda studenter?
6. På vilka nivåer har du handledt studenters uppsatser/examensarbeten (grundutbildningsnivå/avancerad nivå), ungefär hur många studenter har du handledt och hur ofta—per år/termin?
7. Hur många av de examensarbeten som du handledt har lett till att de har publicerats?

Handledning—fördjupning

8. Vad tycker du om att handleda studenter?
9. Hur är du som handledare? (Följdfråga: Vad karakteriserar sättet du leder dina studenter på?)
10. Upplever du att du leder på samma sätt oavsett vilken utbildningsnivå som studenterna är på? (Följdfråga: Om inte—vilka skillnader upplever du att det finns?)
11. Hur tror du att dina studenter skulle beskriva dig som handledare?
12. Utifrån din erfarenhet som handledare, vad har du mött för utmaningar med handledning och hur har du hanterat dessa?

Kvalitet

13. Utifrån din erfarenhet som handledare, vilka faktorer upplever du påverkar kvaliteten av ett examensarbete?
14. Vad upplever du kännetecknar ett examensarbete som har hög kvalitet?
15. Upplever du att din handledning hjälper studenterna att skriva ett examensarbete av hög kvalitet och i så fall på vilket sätt?
16. Vad är viktigt för dig som handledare när du väljer projekt att handleda?
17. Vilka kriterier är viktiga för dig som handledare vid val av studenter?

Authors' translation

The **aim** of this study is to explore the factors that influence the quality of degree projects from both students' and supervisors' perspectives. By identifying (and analysing) these factors, we want to contribute to

a better understanding of what is required to conducting high-quality degree projects.

Interview guide—Supervisors at the study programme of dentistry, KI

Background factors

1. What subjects and courses do you teach, or are you involved in teaching or supervision in any other way?
2. In addition to your teaching and supervision, do you have other assignments that you are involved in? (Assignments can be, e.g. members of examining committees, serving as expert assessor, etc.)
3. Do you have any pedagogical training, e.g. university-level pedagogy, supervisory training or other pedagogical training?
4. What teaching experience do you have? (Follow-up question: How long and how much have you taught?)
5. What is your experience in supervising students?
6. At what levels have you supervised students' theses/degree projects (undergraduate or advanced level), approximately how many students have you supervised and how often—per year/semester?
7. How many of the degree projects that you have supervised have led to a publication?

Supervision—in-depth

8. What do you think about supervising students?
9. How are you as a supervisor (Follow-up question: What characterises the way you supervise your students?)
10. Do you find that you supervise in the same way regardless of the educational level of the students? (Follow-up question: If not—what differences do you feel there are?)
11. How do you think your students would describe you as a supervisor?
12. Based on your experience as a supervisor, what challenges have you encountered with supervision and how have you handled them?

Quality

13. Based on your experience as a supervisor, what factors do you experience influence the quality of a degree project?
14. What do you believe characterises a degree project that has high quality?
15. Do you experience that your supervision helps students to write a degree project of high quality and if so, in what way?
16. What is important to you as a supervisor when choosing projects to supervise?
17. What criteria are important for you as a supervisor when selecting students?

Appendix 2

Original version in Swedish

Syftet med denna undersökning är att utforska vilka faktorer som påverkar kvaliteten på examensarbeten utifrån både studenters och handledares perspektiv. Genom att identifiera (och analysera) dessa faktorer vill vi bidra till en bättre förståelse av vad som krävs för att genomföra högkvalitativa examensarbeten. Enkäten tar ca 15 min att besvara.

1. Jag är
 - a. kvinna
 - b. man
 - c. annat
 - d. vill inte svara
2. Välj de 3 viktigaste faktorerna för dig vid val av examensarbetsprojekt?
 - a. Intressant ämne
 - b. Handledaren
 - c. Skrivpartner
 - d. Att få en publikation
 - e. Att fördjupa dig i ett ämne
 - f. Att det skulle gå snabbt så att du fick tid över till annat
 - g. Att bli meriterad inför en framtida specialistutbildning, eller doktorandtjänst
 - h. Annan, ange vilken faktor: FÄLT
3. Vad upplever du kännetecknar ett examensarbete som har hög kvalitet?
Fritextsvar
4. Vilka egenskaper hos en handledare är viktiga för dig?
Fritextsvar
5. Vilka kriterier är viktiga för dig som student vid val av handledare?
Fritextsvar
6. Hur tror du att din handledare skulle beskriva dig som student som skriver examensarbete?
Fritextsvar
7. Vad har du för förväntningar på din handledare?
Fritextsvar
8. Har du någon tidigare erfarenhet av handledning, t ex att skriva examensarbete i någon annan utbildning?
Ja
Nej
Kommentarsfält:
9. Vilka kriterier är viktiga för dig som student vid val av skrivpartner?
Fritextsvar
10. Vad har du för förväntningar på din skrivpartner?
Fritextsvar

Authors' translation

The **aim** of this study is to explore the factors that influence the quality of degree projects from the perspective of both students and supervisors. By identifying (and analysing) these factors, we want to contribute to a better understanding of what is required to complete high-quality degree projects. The survey takes about 15 min to complete.

1. I am
 - a. woman
 - b. man
 - c. other
 - d. do not want to answer
2. Please select the three most important factors for you when choosing a degree project?
 - a. Interesting topic
 - b. The supervisor
 - c. Writing partner
 - d. Getting a publication
 - e. To immerse yourself in a topic
 - f. That it would go fast so that you would have time for other things
 - g. To be qualified for a future specialist training programme or doctorate position
 - h. Other, specify which factor: FIELD

3. What do you feel characterises a degree project of high quality?
Free-text answer
4. What characteristics of a supervisor are important to you?
Free-text answer
5. What criteria are important to you as a student when choosing a supervisor?
Free-text answer
6. How do you think your supervisor would describe you as a student writing a degree project?
Free-text answer
7. What are your expectations of your supervisor?
Free-text answer
8. Do you have any previous experience of supervision, for example writing a degree project in another educational programme?
Yes
No
Commentary field:
9. What criteria are important to you as a student when choosing a writing partner?
Free-text answer
10. What are your expectations on your writing partner?
Free-text answer