Leadership and work community – views of graduating dental students

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Abstract

Purpose: This study aimed to find out what kinds of views and expectations dental students close to graduating have on leadership and work communities as well as how they expect to fulfill these expectations after completing a leadership course tailored for dental students. The influence of the course on students' views of leadership was also investigated.

Methodology: The research material comprised reflective essays written by 5th-year dental students who had participated in a leadership course. The essays were analyzed using qualitative content analysis.

Findings: Before the course, most students had not considered seeking a leadership position in the future, but most described that their views of leadership had grown more positive as a result of completing the module. Students perceived interpersonal communication competence as the most important factor for leaders, the whole work community, and for themselves. They assessed that their biggest strengths were found in this area. The biggest challenges in adapting to a work community concerned the students' professional identities, which were still taking shape at the time of graduation.

Value: The need for leaders in healthcare professions is growing due to ongoing reforms, the development of new technologies and patient demands. Therefore, undergraduate leadership education is needed to ensure that students have knowledge of leadership and work communities. Graduating dental students' views and expectations concerning leadership and work communities have not been widely explored. Students' perceptions of leadership were positive after the course and helped students to realize their own potential in this area.

Keywords: dental education, dental student, interpersonal communication competence, leadership, work community

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Introduction

The need for leaders in healthcare professions is growing (Morison and McMullan, 2013; Walsh *et al.,* 2015) due to ongoing social and healthcare reforms, the development of new technologies and patient demands (Brocklehurst *et al.,* 2013; Pihlainen *et al.,* 2016; Fontana et al. 2017; Widström *et al.,* 2019). Leadership is an integral part of dentists' everyday work alongside with clinical work, as dentists lead patients' courses of treatment and are in charge of dental care teams. In addition, dentists are work community members operating in dental teams led by their superiors. Leadership can be a potential career choice for a dentist alongside with clinical or research career choices. (Tuononen, 2018) Therefore, it is important that students are provided with training to improve their leadership skills already during their university studies (Vikneshan *et al.,* 2019). As concluded by Wali *et al.* (2018), education on leadership skills introduced in the undergraduate curriculum provides the best opportunity for training students to become future leaders. The teaching of leadership skills can influence the student's education process and has a potential for positively impacting their performance in the labor market (Mota *et al.,* 2018; D'Assunção *et al.,* 2022) However, clinical leadership as well as the views and expectations that dental students have concerning leadership and work communities have received little attention in dental research so far (Walsh et al., 2015; Wali *et al.,* 2018; Hayes and Ingram 2019).

Accordingly, the need for undergraduate leadership programs has been widely recognized (Morison and McMullan, 2013; Kiesewetter *et al.,* 2013; Field *et al.,* 2017a; 2017b), and students have been shown to have an interest in and genuine need for leadership training (Victoroff *et al.,* 2008; Victoroff *et al.,* 2009; Kalenderian *et al.,* 2013). For example, Vikneshan *et al.* (2019) found out that the majority of students agreed that it is important for dentists to have leadership skills but most of the students had not participated in any leadership program. While some universities already offer such courses, some of these are only available for a limited number of participants. This may result in selection bias (Kalenderian *et al.,* 2013), as those interested in participating in the training may already tend to take on leadership roles or have a positive view of leadership in general. So far, dental schools' programs in leadership training seem to have been mainly optional, extracurricular, or voluntary leadership development courses based largely on a generic business school model of leadership education (Victoroff *et al.*, 2009; Kalenderian *et al.,* 2013; Wardman *et al.,* 2017; D'Assunção *et al.*, 2021). However, it is important to be aware that both newly graduated dentists and their more experienced colleagues have considered the level of knowledge and leadership skills of graduates as limited (Koivumäki *et al.,* 2017; D'Assunção *et al.*, 2022). This

imbalance in the supply and demand of competent leaders could be resolved by providing sufficient training in all stages of education and professional life (Morrison and McMullan, 2013; Alestalo, 2015; Walsh *et al.,* 2015). Therefore, it would be most beneficial to have universal student participation in a course addressing leadership tailored for dentists (Wardman *et al.,* 2017; Wali, 2018).

Even though there is a lack of studies evaluating the effectiveness of leadership training courses (Kumar *et al.*, 2020), previous studies have shown that providing education on leadership promotes students' interest and curiosity in becoming effective leaders (Kalenderian *et al.,* 2010; Taichman *et al.,* 2014). D'Assunção *et al.* (2021) concluded that a leadership course organised close to graduation could be relevant to the students as they tend to be more open to also learning about non-clinical topics at this point. There is wide agreement that, for many students, leadership development is best accomplished through a set of practical learning methods (Skoulas *et al.,* 2012; Kalenderian *et al.,* 2013; Wardman *et al.,* 2017; Ayn et al. 2019). For example, case studies and discussions have supported students' development for ethics-based problem-solving and they have gained a better understanding of their leadership skills via role-play, self-reflection, and simulations (Skoulas and Kalenderian, 2012; Wali, 2018; McCunney *et al.,* 2019). The social relationships and interpersonal communication development are important core values shared by these programs, and each places an emphasis on individuals working together in a professional context (Taichman *et al.,* 2012; Kalenderian *et al.,* 2013; D'Assunção *et al.,* 2021).

Additionally, it has been found that new graduates need social support and supportive communication to build their professional identities, especially when they are entering working life (Hakkarainen and Mikkola, 2019). Graduating dental students have considered mentorship to be one of the most important factors in job selection after graduating (Stringer and Kerpelman, 2010; Li *et al.,* 2018; Mei *et al.,* 2020). The transition to working life is a major step for any newly graduated dentist (Hakkarainen and Mikkola, 2019), causing stress and uncertainty in both professional and private life (Di Pierro, 2010). Hence, it is important to determine students' perspectives on leadership and the work community, as knowledge of their views could be used to strengthen the commitment of young professionals and to develop appropriate leadership training. Since students will be responsible for shaping the profession in the future, it is beneficial to get their voices heard on the topic. Therefore, this study aimed to explore what kinds of views and expectations dental students close to graduation have on leadership and work communities, as well as how they expect to fulfill these expectations. The influence of the course on students' views of leadership was also investigated.

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Materials and Methods

The research material consisted of essays written by dental students in their 5th year of education after they had participated in a leadership course, *Dentist as a Leader*, organized at the University of Eastern Finland during spring 2020. The course is organized annually and is included in the compulsory degree requirements of all students. The goal of this course is to provide soon-to-be graduates with knowledge, attitudes, and skills concerning leadership. The course contains lectures, a panel, practical learning exercises, and reflective exercises (more detailed description in table 1). Due to the Covid-19 pandemic, the course had to be modified to fit e-learning platforms on short notice. However, this did not result in any significant changes to the content of the course.

Table 1. here

In total, there were 34 participants in this course, forming the target group of the present study. As participation in the study was voluntary, the study group was made up of 30 volunteers (9 male and 21 female participants). Nearly all the participants had gathered work experience during the previous summer, as undergraduate dental students in Finland are entitled to temporarily practice as a licensed health care professional under supervision in oral health services outside their education (Finlex. Health Care Professionals Act 559/1994).

In the essays, the students were asked to include their thoughts about their views and expectations of dentists as leaders and as well as members of the work community. They also reflected on how they believed they would meet these expectations. The content of the participants' reflective essays was analyzed using the qualitative content analysis method (Elo and Kyngäs, 2008). The content analysis process enables compressing broad subjects, such as in this study, into a comprehensible format.

The first phase of our analysis process included familiarization with the essays written by the participants. The essays were read by three out of the four researchers of this study (MK, MLH, TT). Similar attribute units (words, clauses, and sentences) were grouped, and the number of different themes formed was limited by combining similar attributes together and separating distinctive nuances into the same themes (Tuomi and Sarajärvi, 2018). In this process, several discussions were held about the content of the text material and the way the data were categorized based on the themes which students had been asked to reflect on. Results are shown according to these themes. Brief quotations from some of the essays have been attached to the results section to give the reader an opportunity to assess the interpretations made. Ethical issues were taken into account in this study: all the participants were told that participation was

purely voluntary and they gave their informed consent for the use of the responses for research purposes in the questionnaire.

Results

Interpersonal communication competence is an important skill to a leader and a work community member

In their essays, the students wrote their views and expectations of leadership and work community mainly from the perspective of social interaction. They evaluated interpersonal communication competence as one of the most important skills to a leader and a work community member. Since almost all the students had gathered their first work experience as a dentist during the previous summer, they wrote about their views and expectations partly reflecting on these and partly on the course experiences.

In the context of leadership, students emphasized emotional and supportive aspects such as listening, empathy and emotional intelligence as well as friendliness and encouragement. The students also brought up skills related to giving positive feedback to employees as well as accepting negative feedback from them. A good leader was most often described as someone who treats employees equally, takes care of the wellbeing of the workforce and is able to acknowledge employees as individuals. Cooperation, negotiation, and problem-solving skills were also described as important qualities for a leader. The students expected a good leader to be assertive and to act responsibly, reliably, and purposefully. Openness, flexibility, and patience, and the courage to make compromises and decisions were also mentioned.

In addition, some students perceived patient work as a form of leadership although final decision-making power about the treatment was considered to lie at the hands of the patient. They perceived a dentist to have the highest level of knowledge about the treatment options and opportunities, embodying knowledge-based leadership by communicating these to the patient. The importance of smooth cooperation with a dental assistant was also deemed important.

> Neither can do their part without the other. In fact, you could describe a good partnership as a kind of symbiosis (a dentist and a dental assistant). -Student23-

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Students also reflected on how the leader affects the work community. Opinions were divided: some argued that work community shapes the leader while others considered this to occur in reverse.

…a workplace often looks like its leader. -Student5-

I believe that a leader adapts to the work community's needs. -Student28-

In the context of the work community, what students generally expected from workmates was equal treatment, adherence to rules, and an ability to make compromises. Accordingly, a good work atmosphere was frequently mentioned. While the students gave various definitions of a good work atmosphere, many included aspects such as trust in professional skills, respect, giving and receiving help when needed and openness in interaction. Some students mirrored these viewpoints to their first work experiences as dentists, as the following example shows:

They trusted in my skills and ... listened to my wishes. The positive experiences made me feel confident about my competence and motivated me at work. -Student8-

The students also pointed out that the way in which the workplace is organized influences comfort at work. Having explicit norms and rules at the workplace, continuous evaluation and development were said to improve the effectiveness of a work community. Knowing whom to turn to if help was needed, making sure that everyone's job description is clear to all and ensuring supervisors' availability were factors that the students expected from a good workplace.

Students' self-reflections varied from self-confidence to uncertainty

In relation to the work community, most students believed that they would fit in well, mostly as a result of their interpersonal communication competencies. This included getting along with others at work, being able to maintain a positive atmosphere, showing empathy and sticking to mutual rules. Some examples included motivating colleagues by giving positive feedback and cooperating with all of the staff despite possible differences. While some also mentioned that professional roles and expectations could cause anxiety and stress, they represented a small minority.

I feel that particularly young professionals can take on too much pressure due to expectations, which can cause excessive work-related strain. -Student16-

One of the themes surfacing in the students' essays was their professional identity, which was still taking shape. This was apparent, for instance, as a need for external authority, difficulty in making decisions and

being overly flexible (to the point of exhaustion). The students mentioned that they would feel more confident if they were supported by a senior colleague and by sharing their experiences with other students in the same situation.

> …I still lack confidence in my competence and decision-making. I find myself looking for an authority that I could lean on in decision-making concerning patients. -Student 7-

One key difficulty related to professional identity also concerned assuming the dentist's leadership role in the dentist–dental assistant interactions.

> Some nursing staff members aimed to influence the decisions made on care, usually using the argument "this is the way we have always done this" or "that's what the other dentist does, why wouldn't you?" -Student17-

Some students reflected on their previous negative experiences of not getting their views heard, or the atmosphere at their workplace being less than favorable. Most students particularly struggled with voicing their opinions or getting to influence matters at the workplace. Some mentioned difficulties in convincing others to introduce new practices, as more experienced colleagues had been unwilling to change the way they had always worked. Students were aware that a leader is expected to have comprehensive knowledge of economics and the law. However, as the students considered these topics as either unappealing or too far removed from the field of dentistry, they mentioned these as the most prevalent reasons for opting not to seek a leadership position.

Most of the students expressed changed views on leadership

Most of the students expressed that their views on leadership had changed during the course. Before the module, many had not considered leadership as part of a dentist's job description or had a very negative, even fearful attitude towards this subject.

> For me, just the name of this course, Dentist as a Leader, caused moderate anxiety and despair…. However, the course ended up increasing my knowledge of what it means to serve as a leader and what makes a good leader. -Student11-

Many of the most negative views of leadership were caused by the students' perspective of leadership as a personal trait and a fear of not being able to fulfill related expectations.

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Ultimately, most of the students had neutral to positive views of leadership and some even mentioned that the course had piqued their interest in the matter. The ones who had already regarded leadership positively at the start of the course mentioned that the course content had further strengthened this view. At the end of the course, positive mindsets related to the development of leadership skills could be perceived, emerging as an interest in pursuing leadership training and obtaining practical knowledge from the field of dentistry.

> I have learned to identify my personal strengths as a leader and have also paid attention to areas that I should further develop. -Student 31-

Most, if not all, of the students gained knowledge of the diversity of leadership: most mentioned that, at the start of the module, they had perceived leaders as persons in administrative positions and had never perceived those operating in roles such as mentors as also serving as leaders.

Most of the students who were interested in leadership identified their main motivation as having a personal interest in leadership and opportunities for specialization, and an ability to make a more significant impact on issues. Knowledge-based leadership was also mentioned by those who saw themselves specializing further in dentistry. The students also perceived leading projects and setting clear aims as easier than leading people. The difficulties mentioned related to leading people mostly included leading more experienced colleagues with a strong ideal of professional independence as well as leading other dental health professionals (dental hygienists, dental assistants etc.) whose job content may not be fully clear to the leader.

While not all of the participants wanted to pursue high leadership roles, most participants described they should assume a leadership role in the dentist–dental assistant partnership. Many noted that the dentist carries the ultimate responsibility for the care procedures. Some students mentioned having found it difficult to work with a more experienced assistant who had failed to listen to the student dentist's wishes and instructions. A strong authoritarian leadership style was not mentioned in this context; instead, the students referred to a kind of symbiotic partnership in which both professionals have their own set of responsibilities and there is no strong role division.

Discussion

In this study, students' views and expectations of leadership were positive after the completion of the course. The course had helped students to realize their own potential in this area. The course provoked students to reflect on their first working life experiences as a dentist, which is a positive result of this study. New graduates need support in building self-confidence and belief in their ability to make an impact in the workplace. Interpersonal communication competence was found to be a major factor in leadership, work community and at the individual level.

Our study showed that the dental students close to graduating valued social factors as the most important aspects of a good work community. This included issues such as emotional intelligence, empathy, feedback and open interactions, and interpersonal communication competence at an individual as well as work community level. They emphasized the importance of a good work atmosphere by describing it as trust in professionalism among workmates, mutual respect, and giving and receiving help when needed. This is not surprising, as based on previous studies, these features of a work community are essential to any employees' job satisfaction as well as their quality of life (Li *et al.,* 2018; Shu *et al.,* 2018; Ashraf, 2019). When comparing what our study group appreciated in the work community to previous research findings from different fields and different target groups (Li *et al.,* 2018; Shu *et al.,* 2018; Ashraf, 2019), the themes found were rather similar. However, a new finding which differed from the studies conducted in other work communities concerned students' need and wish for social support and acceptance. This could be due to the fact that increasing work experience leads to the development and reinforcement of one's professional identity, resulting in less of a need for external support. This does not mean that with more experience, social support would not be needed, but perhaps other factors supersede it in importance.

Nearly all students made at least some reference to their professional identity and how this is still in the process of forming. Social support aids career-related decision-making and identity commitment, and support provided in the form of a mentor or a close supervisor would certainly help recent graduates (Stringer and Kerpelman, 2010; Hakkarainen and Mikkola, 2019; Keinänen *et al.,* 2020; Mei *et al.,* 2020). A constructive way of action at work is also linked to the way in which newly graduated dentists feel secure to gather experiences, ask for help, and grow professionally. Mentorship could provide new opportunities for graduates' professional growth and integration into the workforce.

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Mentorship could also be beneficial for lowering the threshold for students to seek help and consultation. This could promote new graduates' transition to working life and their quality of life at this stage. Some students mentioned that the high expectations put on new graduates produce stress and feelings of inadequacy. This result is in line with previous studies that have shown that dentists as well as other healthcare graduates are experiencing fatigue or stress in the early stages of their careers (Di Pierro, 2010; Hakkarainen and Mikkola, 2019).

It is self-evident that we may fail to reach graduates with potential for leadership if they primarily perceive leadership and their own competence negatively. Not every young dentist needs to pursue a high leadership role, but it is important to equip these professionals with knowledge of the forms of leadership that are relevant even in non-leading positions. At the very least, every dentist will be in charge of a dental health team, making decisions on their patient's treatment and especially leading their own work, ensuring that their knowledge is up-to-date and that they engage in continuous training. This shows the need for leadership courses as without this course, some of the students included in this study may have graduated without accurate knowledge of what is required of them in the area of leadership. Universal leadership course would equip new graduates with knowledge and skills that would enable them to tackle upcoming challenges even better (Kalenderian *et al.,* 2013; Hayes and Ingram, 2019; D'Assunção *et al.,* 2022).

As society is subject to increasingly rapid developmental changes, there is a need for enough competent leaders to rise up to the emerging challenges (Brocklehurst *et al.,* 2013; Widström *et al.,*2019). This study showed that students' perceptions of themselves as leaders are often characterized by doubts and, occasionally, even fears. We found that students' perceptions of leadership could be influenced during the course to become more neutral, perhaps even positive. Without this, some may have ended up with an outdated view of what a good leader is and may not have realized their own potential in this area.

Value and limitations

The value of this study lies in the fact that leadership in the dental curriculum is previously a less studied topic and qualitative methods less used in dentistry. The research material obtained from the students' self-reflecting essays is valid and contains information about the research phenomenon as open questions can generate more in-depth knowledge of students' views and expectations compared to methods such as a survey. The study was conducted at the University of Eastern Finland and the findings may not be generalizable across different cultures, educational systems, and professions.

The essays were read in close detail by three of the four researchers and thus strengthen the reliability of these findings. Making excessive interpretations was avoided, although the study method requires a certain degree of the researchers' own conceptualization. A number of discussions was held about the content of the text material and the way it should be categorized. Brief quotations from the essays were attached to give the reader an opportunity to assess the interpretations made.

Conclusions

Dental students should be equipped with knowledge of leadership and related skills before graduating, as these play a relevant role in any dentist's work. Dental students need more competence related to leadership that will enable them to, for instance, manage demanding communication situations and influence matters they find important. The course presented in this article did not only have a positive effect on students' understanding of leadership but also boosted most participants' self-confidence. In addition, this study produced information on leadership and work communities from students' perspectives. These findings could be utilized in developing leadership training as well as in improving daily clinical practice in collaboration between innovative graduates and a supportive work community.

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Table 1. The outline of the Dentist as a Leader course and the content of each section of the leadership course.

Course outline	Content of the course section
Lectures 20 hours	• Orientation lecture (background of the course and orientation to upcoming course activities). • Lectures/discussions by/with young dentists in specialist education (leading one's own work and career and working as a dentist). • Lectures by dentist leaders from the public and private sectors (their careers in leadership, current work, and views of these subjects), and by a leadership professional with a background as a dentist (career path, experiences in various leadership roles). • Panel discussion with dentists who had a degree in dental public health, who were currently participating in the training for this specialty or were planning to participate in it. The panel participants were all at different stages of their leadership careers and had ended up in their positions through different paths. • Lectures by the Finnish Dental Association and the Finnish Patient Insurance Centre (important cooperation organizations for dentists and dentist leaders).
Preliminary tasks for exercises	• Students got articles and literature to familiarize themselves with the topics such as the elements of successful leadership and the development of interpersonal communication competence. Students were asked to make notes to prepare for group exercises while reflecting on the themes emerging from the material.
Practical learning exercises 6 hours	• The first small group exercise involved reflecting on the students' own interpersonal communication competence in the role of a leader as well as a work community member. The students evaluated their strengths in this area and set goals for improving these skills. The students shared their working life experiences with their small group members and presented ideas of what kind of leaders they would like to be. • In the second exercise, students prepared and gave short informative speeches about one important topic in dentistry to two different target groups (i.e. parents, media). The speeches were recorded on video and shared in small groups to be evaluated the strengths and areas of development in speeches.
Reflective exercises	• The students were asked first to write a learning diary during the course about the most relevant and influential topics raised during the lectures and active exercises and how they could implement these ideas in their own professional lives. Then, based on the learning diary, the students wrote 2–4-page reflective essays on their views and expectations of dentists' roles as leaders and work community members and how they viewed themselves in these positions.