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The experiences of unprofessionalism among students in dental education: a qualitative study

Fatemeh Keshmiri[1*]

Abstract

Aim The present study aimed to explore the unprofessional behavior of educators, senior students, and peers in the education process of dental and oral health services.

Method This qualitative study employed a conventional content analysis approach. The undergraduate students ($n=21$) were recruited to participate in the study through purposive sampling. Data were collected through in-depth semi-structured interviews. The qualitative data was analyzed using a five-step conventional content analysis method, as delineated by Graneheim and Lundman. The process involved five steps, including identifying meaning units, condensing them, assigning codes, establishing categories and subcategories, and identifying overarching themes.

Results The students' experiences were explored in a theme "formation of unprofessional subcultures" that includes categories of "multifaceted disrespect", "dishonesty in professional responsibility", and "neglecting the professional accountability."

Conclusion According to the findings, educators and students exhibited unprofessional conduct in accountability, respect, and honesty. The results indicate that disrespectful behavior, dishonesty, irresponsibility, and a lack of accountability have become normal within the dental education system. This normalization occurs through the hidden curriculum, which inadvertently educates students on these unprofessional behaviors alongside the formal curriculum. The subcultures of unprofessionalism were explained as a trigger that significantly influences students' professional development and future behaviors in the dental field.

Keywords Unprofessional, Professionalism, Professional, Dental, Dentistry, Qualitative, Education, Oral health services

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Introduction

Professionalism encompasses values and behaviors essential for a deep commitment to patients, society, the profession, and oneself [1]. In dentistry, professionalism manifests as trust between the dental practitioner and the patient [2]. The General Dental Council (GDC) delineates nine principles of professionalism that encompass 'a personal dimension' including prioritizing patient interests, fostering effective communication, maintaining patient trust with appropriate personal behavior, and 'an organizational dimension', such as confidentiality of patient information [3]. Nguyen and colleagues characterize professionalism as a commitment to ethical principles, including respect for patient autonomy, beneficence, and social justice [4].

A growing body of literature has addressed issues of professionalism and unprofessionalism in healthcare and educational settings [5]. Cserző et al. categorized fundamental issues in professionalism in dentistry into communication, treatment costs, and the dental team's role [5]. Ellis and colleagues analyzed dental professional behaviors, focusing on incidents leading to patient harm and raising public concerns about the profession. Their findings are categorized into poor clinical practice, financial impropriety, dishonesty and fraud, and unethical behavior. Moreover, sexual misconduct, violence, racism, the scope of practice, substance misuse, communication issues in dentistry, and the perception of dentists as fictional characters may impact public trust [6]. Hook and Woolley classed the public's primary concern for dental professionals into clinical safety and competence, ethical and legal compliance, and the importance of teamwork and personal development [1].

The hidden curriculum is a critical aspect of professional education that involves the implicit and informal transmission of norms and values to students. It encompasses the socialization process within the university, during which students learn not only the formal curriculum but also the cultural values and attitudes that shape their professional identities. Through the interactions and behaviors of faculty, senior students, and peers, students learned lessons about professional conduct, character, and informal roles that are part of the hidden curriculum. The hidden curriculum significantly influences students' commitment to their professions and the behaviors they follow [7–9]. Nunez-Mulder and colleagues acknowledged the 'hidden curriculum' in dental schools plays a pivotal role in instilling professional behaviors. Hidden curriculum assists in learning skills such as time management, effective communication, error management, managing complaints, and fostering collaboration with colleagues and supervisors. These behaviors are influenced by the role modeling of educators and staff and are further shaped by the educational structures, practices, and culture of the institution. It is crucial for dental schools to consciously cultivate a learning environment that promotes and reinforces professional conduct [10].

Since the explicit and implicit curriculum in dental schools is pivotal in forming professional identity and future professionals [4], exploring how students perceive their education in professionalism, including their perceptions of professional obligations and unprofessional behaviors is important. Investigating unprofessional behaviors in the dentistry profession can provide suitable resources for training and analysis of the consequences of unprofessional behaviors. By understanding the factors of unprofessional behavior, dental schools can better prepare students to adhere to professional standards and ethical conduct, ultimately fostering a culture of professionalism within the dental community. There is a need for further research to explain the occurrence of unprofessional behaviors toward patients, team members, and professionals within the dental community [1, 4].

The recognition of the unprofessional behavior in the hidden curriculum that triggers other students to participate in professional behavior and mimic the learned behaviors is suggested [11]. Since the incidence of unprofessional behavior is affected by cultural, systemic, and individual factors, conducting more studies in different contexts assists in understanding the phenomenon of unprofessionalism [7–9]. Qualitative research can provide insights into the nature of unprofessionalism across different contexts. Various studies on unprofessionalism in medical schools were conducted [12, 13], and further studies are suggested in dental education and oral health services [1, 6, 14]. The present study aimed to explore the unprofessional behavior of educators, senior students, and peers in the education process of dental and oral health services.

Method

This qualitative study employed a conventional content analysis approach to examine the phenomenon of interest. This method is effective for investigating new phenomena or gaining fresh insights into well-established areas [15]. The exploratory method assists researchers in exploring underlying reasons and perspectives on unprofessional behavior within the dental school environment, contributing to a better understanding of this complex issue.

Study setting and participants

Participants

The number of participants was determined using saturation principles [16], a common approach in qualitative research, where the number of participants is determined iteratively during the study. Sampling continued until data saturation was achieved, indicating that no new

themes or codes emerged from the data, and existing codes were fully explored and refined. The participants comprised dental students who had completed at least six months of their internship courses. (The inclusion criteria). A total of 21 undergraduate students were recruited to participate in the study through a purposive sampling method, which ensured that the sample was representative of the population and provided rich and relevant data for analysis. The students participated including 11 women (52%) and 10 men (48%) and a mean age (SD) of 23 years (±3).

Data collection

Data were collected through in-depth semi-structured interviews. The interviews were conducted by a trained interviewer (Ph.D. graduate in health professions education) with nine years' experiences of qualitative research experience. There was no defined relationship with participants. The interviewees' time was arranged by the participants. The duration of each session ranged from 45 to 60 min.

In the interview sessions, the research objectives and ethical considerations (e.g., participants' right to participate in the study, recording the interview) were explained, and written informed consent was obtained from participants.

Each interview was started with a warm-up and open-ended questions followed by probing questions. The main questions were "Would you please tell me about professionalism in dental school? What about unprofessional behaviors in dental school? What words and actions of educators, senior students, and peers encourage students to engage with unprofessional behavior?".

Data collection continued until data saturation was achieved [16, 17] when no new codes were being generated and existing codes were not being further elaborated or refined. This milestone marked the point at which the data collection process was deemed complete, as further data collection was unlikely to contribute new insights or themes to the study.

Data analysis

In this phase, data from recorded interviews were transcribed and systematically analyzed using a five-step conventional content analysis method, as delineated by Graneheim and Lundman (2004). This methodological approach began with identifying meaning units, followed by condensation, coding, categorization, and synthesizing overarching themes [18].

During the analysis, each interview transcript was read multiple times, allowing for extracting meaningful units and assigning relevant codes. These codes were subsequently grouped into initial subcategories and further classed into categories, reflecting similarities and differences in the data. Themes were identified through the process of constant comparison. To ensure the consistency of the coding process, two experts with experience in qualitative content analysis independently extracted the coding. An expert in qualitative research reviews the coding process, ensuring methodological accuracy. When a consensus was not reached between coders on certain codes, a discussion was initiated to resolve discrepancies.

Rigor

In the present study, several methods were used to ensure trustworthiness [19]. The qualitative content analysis is susceptible to the influence of the researcher's position and biases, which inherently shape the interpretation of the data [20]. A researcher situated within the context of health Professions Education brings experiential knowledge and preconceptions that inform the approach to data collection and analysis. The background as a Health Professions Educator imbues the researcher with a particular understanding of the research topic, which may influence coding and theme exploration. To mitigate the potential for confirmation bias and enhance the transparency and trustworthiness of the findings, the researcher engaged in regular reflexive practices throughout the research process. This involved documenting thoughts and assumptions, seeking feedback from colleagues and peers to challenge interpretations, and critically examining the researcher's position and potential impact on the research.

In this study, a combination of multiple in-depth interviewing techniques, participant peer-checking, and simultaneous researcher analysis was employed to enhance the credibility of the results. The credibility of the findings was further ensured through sustained, in-depth engagement with the data. To maintain the credibility of the research findings, a variety of reflexivity strategies were implemented [20]. Participants were asked to review the explored results to ensure findings aligned with their experiences (member-checking). Additionally, peer debriefing was used to ensure the credibility of the research [21]. Peer debriefing was conducted by two qualified peer researchers who performed a comprehensive review and evaluation of the study's transcripts, categories, and final themes or findings. This process aimed to ensure the accuracy and integrity of the research and to scrutinize the researcher's work for any errors or oversights. Team reflexive dialogue and reflexive writing (memos and field notes) were employed to facilitate critical self-reflection and examination of the research process. Bracketing was used to suspend the researchers' perspectives and gain a deeper understanding of the research participants' experiences. Reflexive journaling was also utilized to track the researchers'

biases, assumptions, and emotional responses to the data, and to identify potential areas of influence on the research findings. By incorporating these reflexivity strategies, the researchers were able to critically evaluate their research practices and enhance the reliability of the research findings. As well, the experts in qualitative research ($n=2$ experts) audit the present results (external audit). Maximum variation in sampling regarding gender, age categories, and participants' experience was deliberated. Constant comparisons were applied to evaluate the semantic and structural coherence of the extracted results. A clear description of the context, the characteristics of the participants, the sampling process, data collection, and data analysis was presented to achieve the transferability criteria.

Ethical consideration

The unprofessionalism field can indeed be challenging to assess through interviews due to the high potential for reporting bias. To mitigate this issue, the study employed several rigorous methodological strategies. Firstly, participants were assured of the confidentiality and anonymity of their responses, thereby reducing social desirability bias. Secondly, a semi-structured interview guide was utilized to ensure consistency in data collection while allowing flexibility to explore emergent themes. In addition, the research team underwent training on ethical research practices, including obtaining written informed consent from all participants, and ensuring they were aware of the study's purpose, procedures, and their rights to withdraw at any point. These measures were designed to uphold the highest standards of ethical research and to ensure the integrity and validity of the findings. The interviewees and the interviewer had no academic relationship to ensure no conflict of interest. To maintain ethical standards, no incentives were offered to the participants, emphasizing the voluntary nature of their involvement. Moreover, participation was entirely voluntary, and participants could withdraw at any step of the study.

Results

The students' experiences were explored in the theme 'formation of unprofessional subcultures' that includes 'multifaceted disrespect', 'dishonesty in professional responsibility', and 'neglecting the professional accountability'. They emphasized a lack of regard for human dignity in interpersonal relationships, a lack of professional integrity, and a failure to fulfill professional obligations. (Fig. 1)

The study's findings indicate that educators and senior students serve as role models, with their unprofessional behaviors being observed and emulated by students. Moreover, it was noted that peers also played a role in normalizing unprofessional behaviors. Consequently, the

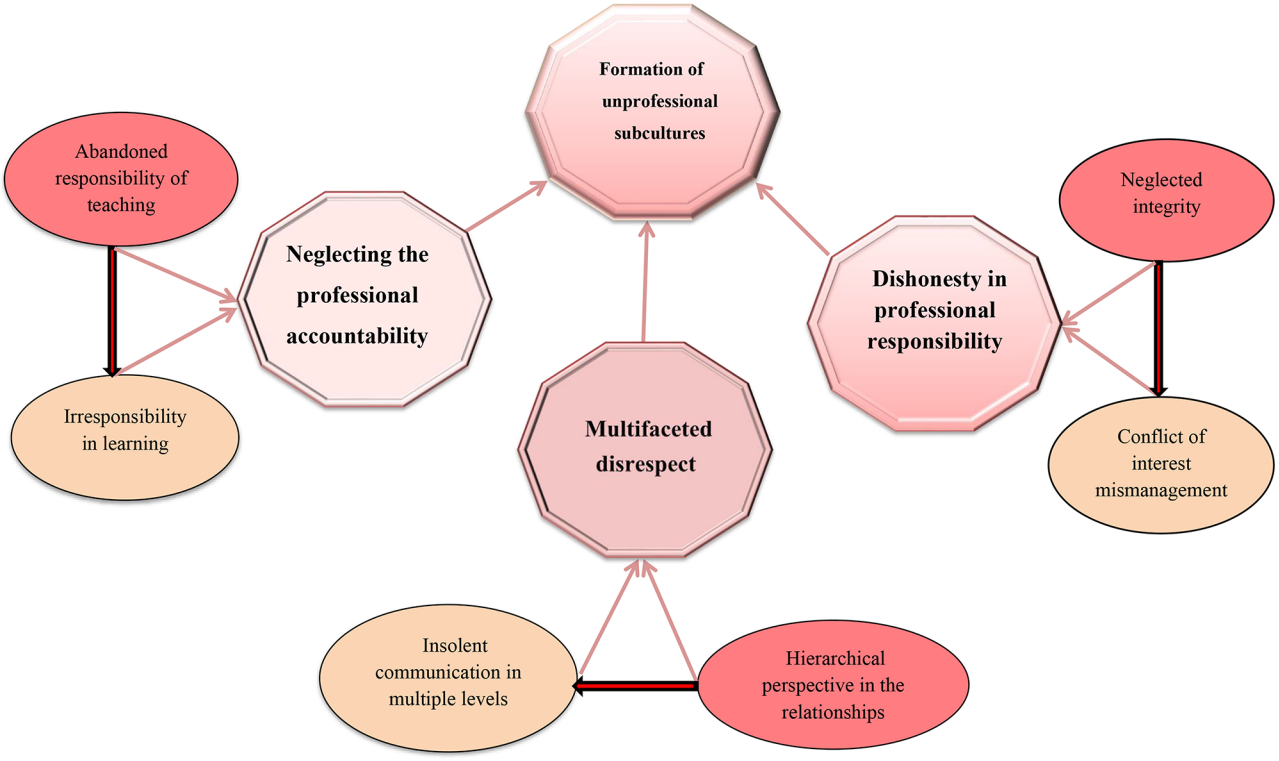

Fig. 1 The students' experience with the unprofessional behavior of educators, senior students, and peers in the education process of dental and oral health services

findings categorized the unprofessional conduct exhibited by educators and senior students, as well as the unprofessional conduct among peers, as factors that contribute to students' normalization and engagement with unprofessionalism. (Table 1).

Multifaceted disrespect

The category explored disrespectful behaviors among team members—including students and educators. The disrespectful behaviors of seniors and educators were learned by students. The disrespectful behaviors in relationships among peers, student-educators, and student-patients were explored in this category.

Hierarchical perspective in the relationships

The students experienced the challenge of rudeness, defamation against colleagues and students, and disregard for students' dignity by seniors and educators. A student said:

The shouting of my educator in the clinic broke my personality and diminished my self-confidence. I am still stressed about the root canal treatment of patients due to the educators' behavior. (Female – 24-year old)

Some educators discorded us because we do not know something, but we are students and do not have to know everything. (Male, 28-years old)

A student says about the unprofessional behavior of educators with each other in a clinic in front of students:

The young educators joined the department, and some older educators underestimated him and criticized their performance in front of students. (Female, 22-years old)

Insolent communication on multiple levels

The spread of disrespectful behaviors among students resulted in a decrease in effective and respectful communication among team members and impacted unsafe environments for learning.

Disrespect in interpersonal and interprofessional interactions with the educators among peers was explored. A student said:

The educator was mocked or given ludicrous titles. (Female, 22-years old)

A student about the patient's rudeness stated:

Some students are rather aggressive. They believe that a human is sitting on the unit and that they may do anything they want and say whatever they want, even though the patient is older than them. Because they feel superior to the patient. (Male, 25-years old)

Dishonesty in professional responsibility

In this category, the unprofessional behaviors in integrity and honesty of educators, seniors, and peers are discussed.

Neglected integrity

In the sub-category, the dishonesty of educators and senior students is classified as a business approach to the profession, lack of punctuality, and discrimination.

Concerning non-commitment to punctuality among educators, a student stated:

Educators and senior students arrive late. The patient has been delayed, and we must wait, yet the educator appears unconcerned with either the student or the patient. (Female, 26 years old).

Educator devotes less time and attention to patients in the educational clinic. Thus, the patient rights are ignored in the public clinics. (Female, 26-years old)

Concerning a patient's discrimination, a student stated:

I observed a student who did not properly repair a patient's teeth in the ward, and the educators said, "Consider the patient's socioeconomic status. If the patient is from the higher class, repeat the procedure; if the patient is from the lower class, just finish it to get rid of the patient." (Male, 29-years old).

A student commented on the patient's dishonest treatment, saying, *I have seen a student who extracted a tooth wrong, the educator advocated for the student rather than apologizing to the patient. (Female, 29-years old)*

Conflict of interest mismanagement

The dishonesty of students was explored in mis-conductions in conflict of interest situations, neglect of altruism, and error discloser and management. Students emphasized self-interest and the preference of their interests above the patient's and system's interests in conflict-of-interest situations. This leads to unethical conduct in the educational system, such as completing redundancy activities for the patient to fulfill their educational requirements, neglecting the patient's demands, or performing producers on the patient without appropriate expertise.

Concerning the students' preference for individual interests in the treatment plan for a patient, they stated:

We need the score of the requirements and must complete them in the ward. Thus, we direct the patient toward what we desire rather than what the patient needs. (Female, 22-years old)

The prioritization of individual interests, aimed at avoiding negative evaluations and feedback from educators and patients, serves as a primary motivator for the manifestation of errors. As a student said:

If I want to be honest with the patient about my error, I will lose patients. It is not appropriate for my future profession. (Male, 28-years old)

Educator easily assigns us a zero for whatever mistake we make. They forget that we are students who may make mistakes; thus, I did not disclose my mistakes. (Female, 25-years old)

Table 1 The students' experiences with unprofessionalism in dental education

Sample of open codes	Sub-category	Category	Theme
Defamation against colleagues and students Disregard for students' dignity	Hierarchical perspective on the relationships	**Multifaceted disrespect**	**Formation of unprofessional subcultures**
Disrespect in interpersonal interactions Rudeness Disrespect in interprofessional relationship Superior perception Arrogant attitude toward patients	Insolent communication on multiple levels		
Business approach to the profession Lack of punctuality Discrimination	Neglected integrity	**Dishonesty in professional responsibility**	
Neglect of altruism Error mismanagement Completing redundancy activities Treatment without expertise Priority of individual interests Marketing perception in dentistry Non-observance of physician-patient principles Discrimination	Conflict of interest mismanagement		
Neglect of teaching role Lack of enthusiasm to teach Not participating in the educational process	Abandoned responsibility of teaching	**Neglecting professional accountability**	
Disrespect for human dignity Lack of motivation for personal and professional excellence Neglect of the patient-centered approach Lack of honesty in completing assignments of students	Irresponsibility in learning		

The student mentioned the following regarding the non-observance of physician-patient communication principles:

I have never seen students introduce themselves or express their expertise. We have been requested to do so, but we are under no obligation to do so. (Male, 27-years old)

A student remarked the following on discriminating practices caused by non-observance of health, economic, and social levels, as well as inequalities across provinces:

In the clinic, the quality of service is influenced by the social levels of patients. The discrimination perspective is accepted among all members. The members' perception allows me to conduct similar behavior with patients. (Female, 29-years old)

In the case of foreign nationals, students may be hesitant to treat them because of their health concerns. (Female, 24-years old)

Neglecting professional accountability

Within this educational setting, challenges related to accountability have been identified and discussed. The findings highlight a troubling norm among the training team: neglecting professional duties is accepted and normalized. This norm is pervasive and has been recognized not only among students but also among educators and seniors who are expected to uphold professional standards. The acceptance of such a challenging norm undermines the essential principles of accountability, which include conscientiousness, responsibility, and commitment to one's duties.

The students explained that the teaching role is not given priority among the educators as the key challenge for spreading unprofessional behaviors. Students stated:

Abandoned responsibility of teaching

The subcategory addressed the neglect of teaching roles and responsibilities by educators and senior students.

Except in a few instances, I did not see an educator interested in educating students or who wanted to be enthusiastic to educate. The majority of educator believe their only responsibility is to assess and grade. (Male, 26-years old)

A student mentioned about educators' lack of enthusiasm to teach students;

Educators are unconcerned with the student's particular inquiry. If students ask a question, they will respond casually, and students prefer to give up. (Male, 32-years old)

About not carrying out professional responsibilities and actively participating in the educational process with compassion for students, a student stated:

Many educators do not even instruct me on what I should do. They say, "These are called students, and they must go out and seek information for themselves." (Female, 22-years old).

Educators should approach students and explain to them step by step what they should do. While our educators are commonly in the office, so we do not try our best for patients. (Male, 24-years old)

Irresponsibility in learning

The unprofessional behaviors observed or experienced by students were classified into disrespect for human dignity, lack of motivation for personal and professional excellence, and neglect of the patient-centered approach.

In the subcategory, the students' experiences about neglecting their responsibility as learners are explained. A student stated:

We seek just the grade, and students are uninterested in learning anything that requires significant effort or goes beyond their class. (Female, 25-years old)

The students want to get a degree and pursue their income. (Male, 32-years old)

We arrive late for college and leave early. (Female, 24-years old)

The difficulties of adapting and properly completing professional tasks were highlighted in this sub-category. The students about the ignorance of therapy and infection control plan stated:

Students do not administer anesthetics correctly, and some have lost the fundamentals. We may avoid providing the patient with the required therapy due to impatience, instead opting for a less time-consuming alternative. (Female, 30-years old)

We may choose to do more monetarily beneficial activities for ourselves. For example, we advise the patient to remove a tooth that we can still keep scientifically to implant it. (Male, 32-years old)

There was a lack of honesty in completing assignments of students. As stated by the student:

It may be the student's responsibility to follow up, but they do not. I have seen students generate data and sign documents. They are just interested in completing the requirements. (Female, 26-years old)

The student added, *"In the case of dress code, too much makeup, nail polish, and nail implants are not ideal since our college is a sanitary place". (Female, 30 years old)*

Unprofessional actions toward patients as students' ignorance of the principles of a patient-centered approach were addressed. The most significant issues described in this subclass include poor communication between students and patients, non-observance of patient rights in participatory decision-making, a lack of mistake management and compensation, and discriminating attitudes.

A student commented on the absence of efficient communication with the patient throughout the treatment process and her involvement in decision-making, saying,

I would prefer not to explain too much to a patient with a lesser culture and education. (Female, 24-years old)

One of the most immoral things is that if something goes wrong and we make a mistake, we prefer to say to the patients that the problem was related to their teeth from the beginning and they did nothing special, or that they did the wrong thing after treatment. (Male, 28-years old)

Discussion

A main concern in dental education is explored "formation of unprofessional subcultures" through "multifaceted disrespect", "dishonesty in professional responsibility", and "neglecting the professional accountability".

A primary concern within the dental education system is the dissemination of disrespectful behaviors among educators and learners. The General Dental Council (2018) explored issues relating to being disrespectful and aggressive as dental practice concerns [22]. The challenges of respect among educators, seniors, and students are explored in the multifaceted disrespect category. The category addressed the hierarchical perspective on the relationships among educators and insolent communication on multiple levels among dental students. The disregarding of human dignity in interpersonal relationships with students and patients, delivering negative criticism and humiliation, led students to be afraid of asking questions and seeking feedback from educators. Moreover, slandering a colleague, and disparaging a colleague in front of a patient or a student were explored as interprofessional disrespect of educators. In line with our results, Nakamura reported a lack of respect for patients (e.g. arrogant attitude toward patients), and a lack of respect for colleagues and other medical professionals were explored as frequent unprofessional behaviors [11].

Furthermore, the results explored the students' disrespect toward educators and patients including mocking educators and calling them derogatory names, and disrespect for the human dignity of patients, which included shouting, insulting, and rude behavior. The students believed in the hierarchical perspective of educators to learn and imitate patients and junior students. In line with our results, Quick explored faculty inconsistency and disrespect experienced by many dental students during their education. Moreover, the clinical students experienced belittlement and destructive communication than the preclinical students. The disrespectful behavior negatively impacted the learning of the students [23]. Disrespectful behavior among peers can undermine the development of a collaborative and team-oriented environment, which is essential for effective healthcare delivery. Furthermore, disrespect towards patients can compromise the empathic relationships that are critical in establishing trust and promoting positive health outcomes. Students may encounter negative and problematic role models, whom they might imitate, leading to an erosion of professional standards [24]. Moreover, the fear of retaliation may result in students mimicking unprofessional behaviors. Students must be supported in disclosing any unprofessional behavior observed within their educational environment to the appropriate school authorities [13]. Moreover, dentistry institutions and schools require providing advanced training in creating a culture of respect to prevent and address unprofessional behaviors and establishing a constructive evaluation system to improve the professional behavior of educators [25, 26].

Dishonesty in professional responsibility was explored as a main unprofessional behavior among educators and students. The neglected integrity category was classed as the observed behavior from educators and senior students concerning dishonesty including a commercial approach to dentistry, discrimination, and lack of punctuality. The results indicated the preferences of personal interests by providing a profitable treatment plan to the patient and the neglect of patients in educational systems was learned in a hidden curriculum. Moreover, the students perceived educators' discrimination against students, particularly during the assessment process, and discrimination towards patients based on their economic status and culture. In line with our findings, Cowpe has identified fraud and dishonesty as prevalent issues in professional misconduct within dentistry. Moreover, the commercial dynamics in dentistry pose the risk of eroding patient trust, particularly when there is a perception that profitability takes precedence over the quality of patient care [22].

Dishonesty is a significant predictor of students' unprofessional behaviors in future careers [27]. Ignorance of the patient-centered approach, inadequate communication with the patient, and a lack of participation in decision-making and patient education were explored as the dishonesty of students. The students reported the prevalence of non-observance of health guidelines such as infection control discriminatory behaviors based on patient's health status, ethnicity, and gender differences, and their appearance were triggered by others involved in unprofessional behaviors. Moreover, a conflict of interest is a critical instance of dishonesty among educational team members in dental school. The findings revealed that students made decisions based on their preferences including getting a good grade and completing the training requirements in conflict-of-interest situations. Medical error management was also explored as a dishonesty among students. Their unprofessional practices in error situations included concealment, secrecy, refusal to

disclose, and componence errors to avoid jeopardizing students' grades or positions. Students felt permitted to undertake dental activities regardless of the principles of honesty and accountability to fulfill their educational requirements. Similarly, Tabatabaei et al. indicated that unprofessional behaviors including 'not accepting responsibility for medical errors', 'not providing feedback to colleagues', and 'not reporting serious cases and compensation had high importance and prevalence among medical students and clinical teachers [28]. The development of a supportive mechanism for training and establishing a culture of error disclosure and management is suggested in dental education.

The neglect of professional accountability of educators and students is explored as a prevalent unprofessional behavior in dental education. The irresponsibility of educators is classed as the 'abandoned responsibility of teaching' in this study. According to the students, educators have neglected the roles of supervisors, providing feedback in workplace teaching, and creating a safe and supportive learning environment. Students felt that their learning was not a priority for educators in the educational system due to a lack of ambition to build a successful teaching-learning process, disdain for student needs, and not providing enough time for instruction. The emphasis on self-learning without prior preparation and exercise in the workplace resulted in a flaw in the student's learning process. The challenges were a trigger for students' neglect of their assigned duties. In line with the present findings, the General Dental Council (2018) explored irresponsibility and discrimination as key concerns in dental practice [22]. In line with the current findings, Nakamura et al. explored triggers of medical students' unprofessional behaviors including lack of compliance with regulations, inappropriate supervision, and unsafe educational environment [11].

The subcategory of 'irresponsibility of learning' addressed the students' neglect of learner roles and their demotivation for personal and professional achievement. Students acknowledged they do not endeavor to improve their personal or professional skills and are not motivated to learn. Most students' primary objective was to pass the exams to obtain a degree. In line with our findings, Makvan der Vossen et al. explained the category of 'failure to engage', which was defined as insufficiently handling one's tasks. The category addressed the unprofessional behavior including poor responsibility, poor motivation, and accepting or seeking a minimally acceptable level of performance [13]. Keshmiri et al. indicated the weakness of responsibility recognition and identity formation as a professional facilitated the engagement of students in unprofessional behaviors [29]. Muhaimin emphasizes that administrators must cultivate a robust organizational culture while actively supporting students and educators in their commitment to professional responsibilities [30].

Strengths and limitations

Unprofessional behaviors in dentistry pose a significant concern, but despite their importance, the topic has been underexplored in the existing literature. This study aimed to address this knowledge gap by exploring the experiences of undergraduate students in dental education. The findings of this study provide valuable insights into the curriculum learned and the unprofessional behaviors encountered by students. However, this study has several limitations that should be acknowledged. One of the primary limitations is that the study focused on the experiences of undergraduate students, without considering the perspectives of other stakeholders, such as educators, nurses, residents, and patients. Future studies suggest exploring the views of these stakeholders to gain a more comprehensive understanding of unprofessional behaviors in dentistry. Furthermore, the study's participants were limited to undergraduate dentistry students at a single university, which restricts the generalizability of the findings to similar contexts.

Implication for dental education and research

- Disrespect among colleagues, educators, students, and patients is a common unprofessional behavior at the dentistry school.
- Personal interests, commercial perspectives, discriminatory conduct, and ignorance of the patient-centered approach were frequent among educators and students, leading to a failure to professional behavior and providing excellent educational and medical services to stakeholders.
- The common unprofessionalism in the accountability domain was concerned with accountability for responsibilities in the roles of teaching and learning. For the educator role, negligence commitment to the teaching role and excellent education, and for the students, lack of motivation for personal and professional development was explained. Failure to respond to duties and a lack of integrity in fulfilling tasks may have a negative influence on educational and dental services.
- It is recommended that professional training programs be developed to address the challenges associated with respect, responsibility, accountability, and honor in the dental education context.
- The establishment of support mechanisms for managing unprofessional behaviors at both the individual and systemic levels is suggested, including the implementation of group discussion sessions

on professional error management and structured feedback sessions.
- The development of professional evaluation mechanisms and constructive feedback systems for all members of the training team is essential.
- The use of error analysis techniques to address unprofessional behaviors in educational sessions is recommended for both students and educators in formal and informal dental education settings.
- The importance of upholding the dignity of individuals, including colleagues, students, and patients, and promoting respectful interactions in the delivery of educational and dental services should be reinforced in the formal and hidden curricula.
- Future studies should investigate the experiences of students and educators in dental faculties to gain a more comprehensive understanding of the phenomenon of unprofessional behavior in dentistry.
- Further research is needed to explore the perspectives of other stakeholders, including educators, nurses, and dental school administrators, on the description and causes of unprofessional behavior.
- Future studies should also examine the aspects of professional behavior in the learning curve, with a focus on the taught curriculum.
- Investigating the effectiveness of interventions aimed at promoting a culture of professionalism is also recommended.

Conclusion

The theme of "formation of unprofessional subcultures" was explored including categories "multifaceted disrespect", "dishonesty in professional responsibility", and "neglecting professional accountability." The unprofessional subculture formation and normalization occur through the hidden curriculum, which is learned by students alongside the formal curriculum. According to the findings, educators and students exhibited unprofessional conduct in accountability, respect, and honesty. These categories are the most significant aspects of professionalism learned and displayed by educators and peers via observation and role modeling. Thus, the development of a professional education program and supportive mechanism focusing on unprofessional behaviors for students and educators is suggested.

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Author contributions
F.K. conceptualized and designed the study. F.K. collected the data and analyzed the data. F.K. interpreted data. F.K. wrote the main manuscript text. The author has met the criteria for authorship and had a role in preparing the manuscript. Also, the author approved the final manuscript.

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Data availability
The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate
The study was approved by the Ethics Committee at the Shahid Sadoughi University of Medical Sciences. Yazd. Iran. (ID: IR.SSU.REC.1403.055). The written informed consent forms were obtained from all participants. The work was conducted by the Declaration of Helsinki. All participants were provided with information on the study and gave consent. The interviewees and the interviewer did not have an academic cooperation relationship. However, four interviewees were selected from the university where the researcher worked. Participants were not given any gifts for participating in the study. They voluntarily participated in the study when the objectives of the study, the methodology, and why the study was being conducted were explained to them. The author utilized artificial intelligence in the editing and proofreading process.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

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