


# Profile and factors associated with the desired job market among students of the Dentistry Course at Universidade Estadual de Ponta Grossa


Amanda Rutyna Havresko<sup>1</sup>

 0009-0005-1905-0678


Débora Cristina Lima de Almeida<sup>1</sup>

 0009-0004-8660-7213

Anna Bárbara Maluf<sup>1</sup>

 0009-0009-2498-9128

Cristina Berger Fadel<sup>1</sup>

 0000-0002-7203-2867

Manoelito Ferreira Silva-Junior<sup>2</sup>

 0009-0005-2879-2489

<sup>1</sup>Universidade Estadual de Ponta Grossa (UEPG), Ponta Grossa, Paraná, Brasil.

<sup>2</sup>Universidade Estadual do Sudoeste da Bahia (UESB), Jequié, Bahia, Brasil.

## Correspondence:

Manoelito Ferreira Silva Junior

E-mail: manoelito.junior@uesb.edu.br

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**Abstract** The study aimed to analyze the students' profile, reasons why they chose the course, intention to further their studies in postgraduate programs as well as the demographic, socioeconomic and academic factors associated with the desired job market among students entering the Dentistry course at the State University of Ponta Grossa (UEPG). This quantitative, cross-sectional and analytical study was carried out with students beginning the dentistry course in 2018, 2020, 2021 and 2022, in the first month of lessons of the first semester of each class with onsite data collection in 2018 and online from 2020 to 2022. The structured questionnaire about demographic, socioeconomic, academic data, reasons why the course was chosen, intention to further studies in postgraduate programs, and the desired job market was developed by the researchers. Descriptive analysis by means of absolute (n) and relative (%) frequencies was carried out as well as analytical analysis using the chi-square/Fisher's exact tests ( $p < 0.05$ ). Two hundred and fifteen students took part in the test (response rate: 89.6%) and most of them were 18 years old (42.5%), female (74.4%), single (99.5%), with family income ranging between 3 and 4 minimum wages (31.2%), and born in the municipality of Ponta Grossa, PR (58.6%). Public service was the most desired job market among the students starting the dentistry course; however, female participants showed higher interest in that specific service than their male counterparts ( $p = 0.020$ ). The profile of the students starting the course showed mostly young women, which matches the profile of a full-time course that requires more time dedication from the students. The participant students starting the dentistry course showed great interest in the public service, mainly the female participants.

**Descriptors:** Job Market. Health Workforce. Students, Dental.

## Perfil y factores asociados al mercado laboral deseado entre los estudiantes que ingresan a la Carrera de Odontología de la Universidade Estadual de Ponta Grossa

**Resumen** El objetivo del estudio fue analizar el perfil de los estudiantes, los motivos de elección de la carrera, la intención de formación de posgrado y los factores demográficos, socioeconómicos y académicos asociados al mercado laboral deseado entre los estudiantes que ingresan a la carrera de Odontología de la Universidad Estadual de Ponta Grossa (UEPG). El estudio cuantitativo, transversal y analítico se realizó con estudiantes de Odontología que ingresaron en los años 2018, 2020, 2021 y 2022, en el primer mes de clases del primer semestre de cada promoción, con recogida presencial en 2018 y online en 2020, al 2022. El cuestionario estructurado sobre datos demográficos, socioeconómicos, académicos, motivos de elección del curso, intención de graduarse y mercado laboral deseado fue desarrollado por los investigadores. Se realizó análisis descriptivo mediante frecuencias absolutas (n) y relativas (%) y análisis analítico mediante la prueba chi-cuadrado/exacta de Fisher ( $p < 0,05$ ). Participaron del estudio 215 académicos (tasa de respuesta: 89,6%), la mayoría de los cuales tenían 18 años (42,5%), mujeres (74,4%), solteros (99,5%), con ingresos familiares entre 3 y 4 salarios mínimos (31,2 %), origen del municipio de Ponta Grossa, PR (58,6%). El servicio público fue el mercado laboral más deseado entre los estudiantes entrantes de Odontología, mostrando mayor interés las mujeres en comparación con los hombres ( $p = 0,020$ ). El perfil de los académicos entrantes estuvo conformado por mujeres y con un perfil joven, acorde con el perfil de una carrera de tiempo completo, con la necesidad de una amplia dedicación por parte de los académicos. Hubo un gran interés entre los académicos entrantes de Odontología en el mercado público, con mayor interés entre las mujeres.

**Descritores:** Mercado de Trabajo. Fuerza Laboral en Salud. Estudiantes de Odontología.

### **Perfil e fatores associados ao mercado de trabalho desejado entre ingressantes do Curso de Odontologia da Universidade Estadual de Ponta Grossa**

**Resumo** O objetivo do estudo foi analisar o perfil dos estudantes, motivos de escolha do curso, intenção de formação em pós-graduação e os fatores demográficos, socioeconômicos e acadêmicos associados ao mercado de trabalho desejado entre acadêmicos ingressantes do curso de Odontologia da Universidade Estadual de Ponta Grossa (UEPG). O estudo quantitativo, transversal e analítico foi realizado com acadêmicos de Odontologia ingressantes no ano de 2018, 2020, 2021 e 2022, no primeiro mês de aula do primeiro semestre de cada turma, com coleta presencial em 2018 e *on-line* em 2020 a 2022. O questionário estruturado sobre dados demográficos, socioeconômicos, acadêmicos, motivos de escolha do curso, intenção de formação em pós-graduação e mercado de trabalho desejado foi desenvolvido pelos pesquisadores. Houve análise descritiva por meio de frequências absolutas (n) e relativas (%) e analítica com teste qui-quadrado/exato de Fisher ( $p < 0,05$ ). Participaram do estudo 215 acadêmicos (taxa de resposta: 89,6%), sendo a maior parte com 18 anos (42,5%), mulher (74,4%), solteira (99,5%), com renda familiar entre 3 e 4 salários mínimos (31,2%), origem do município de Ponta Grossa, PR (58,6%). O serviço público foi o mercado de trabalho mais desejado entre os acadêmicos de Odontologia ingressantes, sendo que as mulheres apresentaram maior interesse comparado aos homens ( $p = 0,020$ ). O perfil dos acadêmicos ingressantes foi composto por mulheres e com perfil jovem, condizente com o perfil de um curso integral, com necessidade de ampla dedicação dos acadêmicos. Houve alto interesse dos acadêmicos ingressantes de Odontologia no mercado público, sendo maior entre as mulheres.

**Descritores:** Mercado de Trabalho. Recursos Humanos para a Saúde. Estudiantes de Odontología.

## **INTRODUCTION**

The implementation and enlarging of the universal health system in Brazil, the Unified Health System (SUS)<sup>1</sup> evidenced a gap between the offer of health services, health education, and the population's health needs<sup>2</sup>. Over time, it became evident that the action profile of professionals qualified in the dentistry colleges of the country was not fully suitable to work in the perspective of health as a social product or for the holistic and equal care, which are fundamental principles of the public health system<sup>1,3</sup>.

From the ethical-legal standpoint, SUS recognizes the professional qualification as a relevant factor in the construction of a resolute system. Therefore, from 1996 onwards, the change of the undergraduate course curricula became a relevant issue, initially confirmed by the Law of Guidelines and Bases (LDB) of Education in Brazil, that is, Law n° 9,394/96, which provided for changes in the courses by revoking the minimum curriculum<sup>4</sup>. Later, in 2002, The National Curriculum Guidelines (DCN) for the dentistry course were created and updated in 2021, which resulted in the creation of a curriculum that could contribute to the qualification of a new academic and professional profile, making health professionals able to work with quality, efficiency, and resolution in the current health system<sup>2,5,6</sup>. This allowed that at both individual and collective levels, professionals can develop health prevention, promotion, protection, and rehabilitation actions<sup>7</sup>, thus eliminating the elitist education trend, which was not concerned with the social role of health services or health prevention and promotion issues<sup>8</sup>.

In the last few years, there has been an increase in part-time employment relationships, with a division between the private work, mainly in the supplementary health services, and public work<sup>9,10</sup>, with increased search, mainly by newly-graduates, for the public health area<sup>9</sup>. However, few studies have explored the real motivations of this fact, and several

aspects might influence the trend toward the health public service, such as the saturation of some areas of the private market and large offer and work perspectives in the public service. Another factor is the substantial change in the sociocultural diversity of students entering public universities, mainly in more traditional courses such as those of the health area. Nevertheless, it is interesting to observe that in the long run, the interest in continuing in the public service tends to decrease, and many professionals have reported the need to keep more than one income source<sup>7,11</sup>.

Analyzing the professional perspectives of the job market among students starting the dentistry course reveals a different perspective regarding participants of studies with students developing or concluding the course since those entering the course have not suffered the formative influence of the higher education course yet<sup>10-16</sup>. For this reason, this study aimed to analyze those students' profile, the reasons why they chose this course, their intention to further their studies in postgraduate program, and the demographic, socioeconomic, and academic factors associated with the desired job market among students starting the Dentistry undergraduate course at the State University of Ponta Grossa (UEPG).

## METHODS

This is a quantitative, cross-sectional and analytical study developed with students entering the Dentistry course at UEPG, Paraná, Brazil. It was previously approved by the institution Research Ethics Committee (CAAE: 01591218.9.0000.0105, opinion nº. 1.821.264).

The Dentistry Course Pedagogical Project (PPC), version 11, started in 2016 and was in force up to 2022, that is, it refers to all classes being analyzed. The course had a 4,773-hour total workload, was a full-time course, with a minimum conclusion time of five years and a maximum period of seven years. The higher education institution (HEI) offers 60 annual vacancies for the course, with one date of start per year (first semester of the academic year), distributed into 45 vacancies for the university selective process called *vestibular*, divided into two exams a year, and 15 vacancies for the Serial Selective Process (PSS), which is divided into three exams that are taken one in each year of high school.

In 2007, UEPG adopted a system of affirmative actions for university access, with assignment of vacancies for social groups according to their income (public schools) and race/color (black). In each of the two annual *vestibular* exams, a different division was adopted. There are 45 vacancies in this type of entrance exam, they have been divided in different ways over time. Considering those entering the course up to 2020, 5 vacancies were destined to black candidates, 18 to those who had completed their previous studies in public schools, and 22 were universal vacancies. In 2021, the number of vacancies destined to race/color included another criterion, that is, those candidates should have also previously studied in public schools. Therefore, those became 5 vacancies for black candidates coming from public schools, 18 for candidates that had been students in public schools, and 22 universal vacancies. For those entering in 2022, a new modality of vacancy distribution was included, namely, that for disabled individuals (PCD), with 5 vacancies. In the Serial Selective Process (PSS), there are no pre-determined vacancies, that is, the 15 vacancies are universal (Table 1). The HEI also includes vacancies for the Indigenous Peoples' *vestibular*, excess vacancies, calls for External Transfer or for those who already own a Higher Education Certificate.

The study was designed with the total elected universe of students entering the Dentistry course at UEPG in 2018, 2020, 2021 and 2022 (N=240). The study eligibility criteria included starting the Dentistry course at UEPG in 2018, 2020, 2021 or 2022. The exclusion criteria were duplicate of responses in the online format, retained students or those that were not found/did not reply after three attempts to contact.

The lists of students enrolled per academic semester was obtained by the course coordination, and the data collection occurred in the first academic semester the student was enrolled in the course per class (year). In 2018, data was collected onsite in the classroom. When students were absent, the researcher tried to contact them three times to invite them to participate. Between 2020 and 2022, due to the Covid-19 pandemic, the form was adapted into an electronic form (Google Forms) and the researcher's contact was via de social media WhatsApp. The researcher contacted the class leader and was inserted in the whatsapp group as a member of the class. After that, he sent an invitation text, the access to the Free and Informed Consent Form, Free and Informed Agreement Term, and the form. The invitation

was sent twice in the group, when students did not reply, a last invitation was directed to those specific students who had not adhered or did not reply saying that they did not want to participate.

**Table 1.** Distribution of vacancies in the vestibulares of the years the participant students entered the Dentistry Course at UEPG, Brazil, 2018 and 2020 to 2022.

Year of entrance	Vestibular	Vacancies					Total
		Universal	Quotas			PcD****	
Black***	Black/ Public School***		Public School *				
2018	Winter	11	2	-	9	-	45
	Summer	11	3	-	9	-	
2020	Winter	11	3	-	9	-	45
	Summer	11	2	-	9	-	
2021	Single	22	-	5	18	-	45
2022	Spring	11	-	3	9	-	45
	Autumn	9	-	2	8	3	

\*Type of vacancy reserve started in 2007; \*\*Type of vacancy reserve finished in 2020, which returned in 2023; \*\*\*Type of vacancy reserve started in 2021; \*\*\*\* Disabled individuals: type of vacancy reserve started in 2022.

The data collection instrument was a structured questionnaire about demographic, socioeconomic, and academic data, reason(s) why the course was chosen, intention to further studies in the postgraduate program, and desired job market, which was elaborated by the researchers. Seeking to improve the data collection instrument, a pre-test was carried out with a group of ten dentistry students from another higher education institution. Adjustments were required in the standard answer items to favor understanding and so that all the questions were answered.

The study dependent variable was dichotomized according to the desired job market, either public or private. The independent variables were demographic factors, as follows: sex (man or woman), age ( $\leq 18$  years old  $\geq 9$  years old), city of origin (Ponta Grossa or others); socioeconomic factors: family income ( $\leq 4$  minimum wages or  $\geq 5$  minimum wages) and type of high school (public or private); and academic factors: type of university entrance exam (vestibular or Serial Selective Process) and type of vacancy applied for (universal or quotas).

The 2018 data was tabulated using the Excel 2010 software (Microsoft Corp, Redmonton, WA, EUA), while those from 2020 to 2022 were directly tabulated using the same software by means of Google Forms. The descriptive analysis was carried out by means of absolute (n) and relative (%) frequencies and the use of association tests between the outcome and the independent variables employing the Exact Fisher's test or the Chi-square test ( $p < 0.05$ ).

## RESULTS

Although the database initially included 220 answers, 5 were excluded for being duplicates of the respondents of the online form. Therefore, 215 freshmen participated with an 89.6% response rate, distributed among 52 students in 2018 (86.7%), 60 in 2020 (100.0%), 56 in 2021 (93.3%), and 47 in 2022 (78.3%).

Most of the students starting the dentistry course who took part in the study were 18 years old (42.5%), women (74.4%), single (99.5%), without children (100.0%), family income between 3 and 4 minimum wages (31.2%), without their own income (97.7%), and were originally from the municipality of Ponta Grossa, PR (58.6%) (Table 2).

Most of the freshmen had concluded high school in a private institution (58.0). Their entrance in the Dentistry undergraduate course at UEPG was mainly via the vestibular examination (75.7%), in a universal vacancy (62.8%) (Table 3).

The main reasons reported for having chosen the dentistry course included professional and personal fulfilment (31.2%)

and working in the health area/ with patients (29.8%) (Table 3).

**Tabela 2.** Características sociodemográficas dos ingressantes no Curso de Odontologia da UEPG, Brasil, 2018 and 2020 to 2022.

Variable	n	%
<i>Age (years) (n=214)</i>		
17	41	19.2
18	91	42.5
19	42	19.6
20	28	13.1
21	10	4.7
22	8	3.7
23	3	1.4
24	2	0.9
26	1	0.5
27	1	0.5
<i>Sex (n=215)</i>		
Woman	160	74.4
Man	55	25.6
<i>Marital status (n=215)</i>		
Single	214	99.5
Married	1	0.5
<i>Children (n=215)</i>		
No	215	100.0
Yes	-	-
<i>Family income (n=215)</i>		
1 to 2 minimum wages	16	7.3
3 to 4 minimum wages	67	31.2
5 to 6 minimum wages	63	29.3
7 to 8 minimum wages	29	13.5
Over 8 minimum wages	38	17.7
<i>Financially independent/own income (n=215)</i>		
No	210	97.7
Yes	5	2.3
<i>City of origin (n=215)</i>		
Ponta Grossa – PR	126	58.6
Other cities in the state of Paraná	79	36.7
Minas Gerais	1	0.5
São Paulo	4	1.8
Santa Catarina	5	2.3

The postgraduate programs that appeal the most to the freshmen are *lato sensu* courses, such as specialization (88.6%), qualification/update (76.8%) and *stricto sensu* courses, such as Master's (65.7%), followed by residency (64.5%) and doctoral (57.3%) programs (Figure 1).

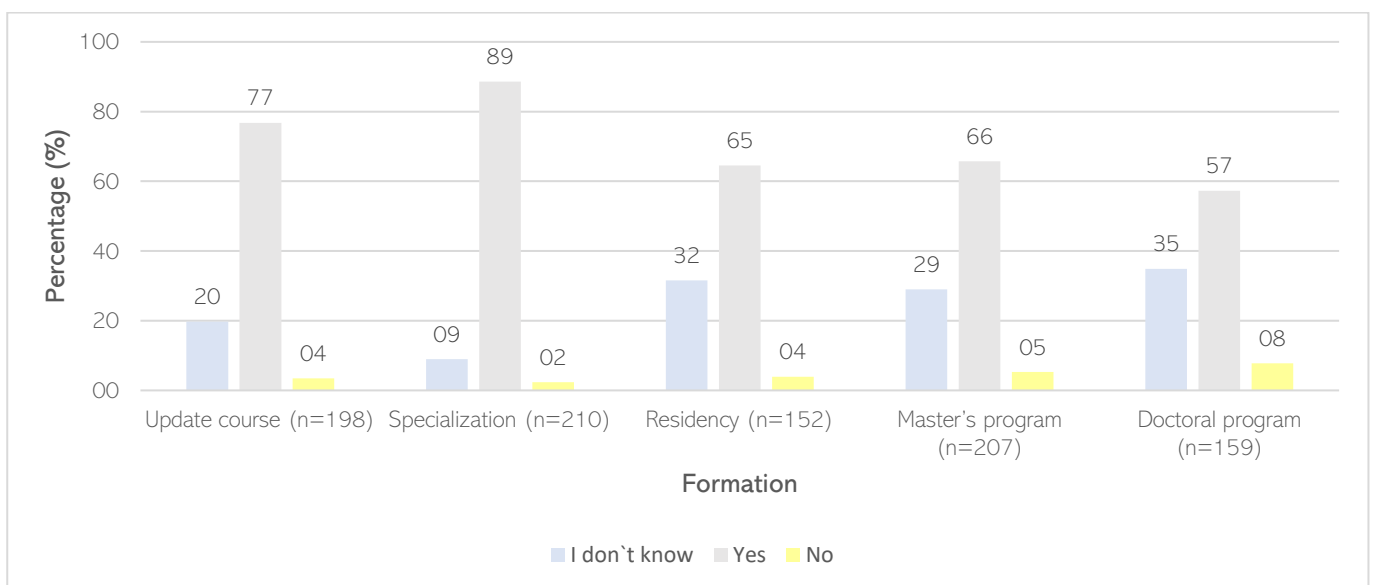
The main desired job market model according to the participants was the public service (n=81; 37.7%), followed by the private sector (n=66; 30.7%). Some also reported their interest in both public and private systems simultaneously (n=16; 7.4%) or teaching (n=4; 1.8%). Forty-eight participants (22.3%) did not know or did not answer that question.

When considering demographic and socioeconomic factors, type of university entrance exam, and type of desired job market among freshmen in the Dentistry undergraduate course, sex was the only associated factor ( $p=0,020$ ), and women showed higher interest in working in the public service (Table 4).

**Table 3.** Academic characteristics of the freshmen of the Dentistry undergraduate course at UEPG, Brazil, 2018 and 2020 to 2022.

Variable	n	%
<i>Type of institution where high school was studied (n=214)</i>		
Private	124	58.0
Public	88	41.1
Public and private	2	0.9
<i>University entrance exam (n=214)</i>		
Serial selective process	52	24.3
Vestibular	162	75.7
<i>Type of higher education vacancy (n=215)</i>		
Universal	135	62.8
Social quota	74	34.4
Social and racial quota	6	2.8
<i>Main reason for having chosen the course (n=215)</i>		
Affinity with the curriculum content	1	0.5
For thinking that the profession provides prestige and/or income		
For thinking that the profession has a large work/action field	29	13.5
For being influenced by relatives, friends or other people	9	4.2
For seeking professional and personal achievement	67	31.2
For being in the health area/ working with patients	64	29.8
For being the second option of course	1	0.5
For being self-employed (independence)	2	0.9
For having somebody in the family with this profession	8	3.7
For living close to the institution	2	0.9
For the institution quality	1	0.5
Course reference	1	0.5
Because it was a dream since childhood	2	0.9
For having positive experiences in the dentistry area	23	10.7

\* Some variables do not total n=220 due to missing data.



**Figure 1.** Distribution of the type of desired postgraduate programs among students starting the Dentistry undergraduate course at UEPG, Brazil, 2018, 2020 to 2022.

**Table 4.** Association between sociodemographic and academic factors and desired job market among students starting the Dentistry undergraduate course at UEPG, Brazil, 2018 and 2020 to 2022.

Variables	Desired job market***		
	Public n (%)	Private n (%)	p-value*
<i>Demographic factors</i>			
Age (years) (n=151)			
Up to 18	54 (60.0)	36 (40.0)	0.189
19 or +	30 (49.2)	31 (50.8)	
Sex (n=151)			
Woman	68 (61.3)	43 (38.7)	0.020
Man	16 (40.0)	24 (60.0)	
City of origin (n=151)			
Ponta Grossa	48 (52.2)	44 (47.8)	0.286
Others	36 (61.0)	23 (39.0)	
<i>Socioeconomic factors</i>			
Family income (minimum wage) (n=151)			
1 to 4	38 (59.4)	26 (40.6)	0.427
5 or +	46 (52.9)	41 (47.1)	
Type of high school (n=150)**			
Private	38 (63.3)	22 (36.7)	0.108
Public	45 (50.0)	45 (50.0)	
<i>Education factors</i>			
Type of university entrance exam (n=151)			
PSS	66 (56.4)	51 (43.6)	0.720
Vestibular	18 (52.9)	16 (47.1)	
Type of vacancy applied for (n=151)			
Universal	48 (50.5)	47 (49.5)	0.100
Quotas	46 (64.3)	20 (35.7)	

\*Chi-square test ( $p < 0.05$ ); \*\*Excluded those who answered public/private; \*\*\*Excluded those who answered public/private or teaching or Missing data; PSS: Serial Selective Process.

## DISCUSSION

Both this study and the literature have reported a very similar profile among dentistry students, that is, they are mostly young single women without children<sup>14,17,18</sup>. The search for higher education for better opportunities in the job market and longer time for stability after the start of the professional career have led individuals to first seek professional fulfillment, thus starting new families later in life<sup>19</sup>. This fact might justify the profile of students that are young, single, have no children or personal income. In this public institution, since the Dentistry undergraduate course at UEPG is a full-time course, it becomes more difficult for individuals to enter and conclude the course when they cannot dedicate all their time to the different times of activities scheduled over the years of study.

This study also revealed higher prevalence of women entering the dentistry course, which is confirmed in the literature<sup>7,8,10,12,14,15,17-24</sup> and evidences the process of feminization of higher courses, including in areas that were historically considered male professions such as dentistry<sup>8</sup>. This change started in the mid-70s due to several factors, such as: changes in the labor model and the reappearance of the contemporary feminist movement<sup>25</sup>. Another relevant factor in the reduction of gender inequalities at the higher education level in Brazil occurred in the 90s, when new policies favoring the access to education were created. At the end of that decade, women already outnumbered men in the profession<sup>20,25</sup>. According to data published by the Ministry of Labor and Social Security<sup>25</sup>, women already occupy most of the vacancies in schools, universities and qualification courses in the country.

Studies have reported some changes in the profile of students entering the dentistry course, previous studies showed

elitism in the profession, in which the students in this course were those whose parents had higher schooling<sup>10</sup> and higher family income<sup>15</sup>. However, this study reported family income between three and four minimum wages and greater participation of students coming from public schools. This aspect results mainly from the inclusion of affirmative policies in the Brazilian higher education public institutions, which favor the entrance of individuals with less favorable sociodemographic conditions, aiming to create universalization for social groups that up to now did not have the right to higher education<sup>8,16</sup>. At UEPG, these policies have been in force since 2006, starting with the 40% reserve of vacancies for students coming from public schools, and up to 10% for black students coming from public schools.

In the HEI analyzed, the freshmen who studied high school in a private institution were still the majority. However, the proportion was much lower when compared to the study carried out in a private HEI (90.5%)<sup>24</sup>. This fact might be justified by the vacancy reserve by means of quotas, which has not reached 50% in this HEI but is already close to 40%. In addition, when considering the PSS vacancies, there is no distinction for the type of school where high school was studied, that is, all vacancies are universal. However, although the students come from public schools, the HEI does not have a specific policy to support dentistry students, and the financial support is the same granted in other courses. For this reason, it is sometimes impossible for those individuals to remain in the course, due to the high financial cost to buy permanent material or consumables for the practical laboratory and clinical subjects. Therefore, those coming from private high schools might have greater chances of being supported by family income, which might encourage them to be interested in and have conditions to enter the course and to complete it. Thus, urgent measures are required so that the HEI can meet specific requirements of the dentistry course.

Even with the increased number of students with less favorable socioeconomic conditions, it seems relevant to observe that institutions must be attentive to dropouts and their reasons. Specially in dentistry courses, even if students coming from public schools manage to start the course, they have to face expenses related to the purchase of permanent and disposable materials to take part in laboratory and clinical practice subjects, which requires more financial investment. This study showed that most students do not have their own income, that is, they are provided for by their families<sup>7</sup>. For this reason, students with a higher family income and parents with higher schooling, and who come from private high schools have more chances of entering and remaining in higher education<sup>26</sup>. Taking that into account, some universities have some ways to keep their students by means of scholarships linked to research, teaching, outreach, and innovation, or other specific allowances for low-income students such as accommodation allowance and financial support to buy dental materials. However, UEPG does not have a students' home, and they only provide some financial support to remain in the course, which is the same value granted to other graduation courses. This profile of students who do not have their own income and cannot work might be changed in the near future, mainly in private institutions since more and more vacancies have been offered in part-time dentistry courses in Brazil.

As observed in this study, most of the freshmen's city of origin is Ponta Grossa, state of Paraná, that is, the city where the institution is located. This shows the social impact of the university presence in the local/regional development since it impacts positively the promotion of qualified workforce and enables the education of more critical citizens who are committed to the population's needs<sup>27</sup>. Furthermore, the institution carries out dental care, education and prevention activities inside and outside the university, which benefit the population of the city and of the region of Campos Gerais, where the city is located.

The choice of the dentistry course has been motivated for being a course in the health area, which reveals students' preference, keenness and curiosity for the biological sciences theoretical contents<sup>22</sup>. Other reasons were listed such as family influence, university influence, friends' influence, desire to help people and to obtain social and economic growth. Similar results were reported by a study carried out in a private university in Campinas-SP, in which most of the undergraduates answered that their choice of university course, that is dentistry, was motivated by the fact that it was a course in the health area, followed by the influence of a professional dentist<sup>21</sup>. According to Gondim *et al.* (2021)<sup>17</sup>, the first motivation to choose a dentistry course is vocation, other reasons include stability desire, family influence, financial gains, and the profession status.



Although studies with dentistry students have shown that most of them feel prepared for the job market, they also report that students expect to find difficulties due to their lack of experience, lack of self-confidence, market saturation, and low salaries<sup>28</sup>. A lack of self-confidence and the thought that better qualifications are needed for their success, lead them to further their studies. One way of outstanding in the job market in the freshmen's view is increasing their professional qualification<sup>29</sup>.

In this study, the postgraduate courses that most appealed to the participants were *lato sensu* programs such as qualification/update, specialization, and residency, followed by *stricto sensu* courses, that is, master's and doctoral programs. This data confirms a study carried out by Mendonça *et al.* (2021)<sup>30</sup>, in which most of the students showed interest in improving their talents and skills by attending *lato* and *stricto sensu* courses, since they believed that their success depended on their better qualification as surgeon-dentists. It seems relevant to emphasize that when comparing with older studies, the number of professionals and undergraduates that completed the course, are studying or showed interest in improvement or update courses, specialization, and residency has increased noticeably<sup>31</sup>. Specialization courses are the ones most cited, and the attendance of these courses usually occurs from 6 months to 1 year after graduation<sup>10</sup>. This shows a trend of continuous education in search of knowledge and/or titles after the graduation<sup>32</sup>.

Specialization is considered a way to create opportunities in the job market<sup>29</sup>. Their interest in postgraduate studies might be justified by the new graduates' need to obtain higher qualifications before entering the job market, which would differentiate them from other professionals. Another factor might be the offer of scholarships, which guarantees some income while they develop the postgraduate program<sup>20</sup>. Also, even if they are more recent in Brazil, both uniprofessional and multiprofessional dentistry residencies have become a quite attractive type of study for those graduating in dentistry for being a space of continuous education that guarantees their income for two or three years after the end of the course. Such study grants are sometimes better than the initial wage of the profession and might be an alternative to tackle the difficulties of entering the formal job market<sup>33</sup>.

Changes that occurred in dentistry have influenced the profile of those choosing the course and those that are already professionals, the type of service offered, the number of hours worked, the postgraduate studies, and the level of professional satisfaction. Due to the saturation of the private market, the number of professionals seeking other types of income, such as part-time work in the public and private service, has increased<sup>34</sup>. This occurs due to the advantages of each type of service<sup>29</sup>. Although the public health is still considered a service with low salaries, it can provide financial stability and legal labor benefits<sup>36</sup>, which is extremely relevant for the new graduates, while the private practice aggregates social status and financial gains<sup>30</sup>. It seems relevant to highlight that this study was developed with students entering the course, that is, they might have very little knowledge of the job market and have not been influenced by formative factors that might interfere with their professional choice, such as more information about the general and specialist qualifications; notions of private and public market, mainly obtained in the SUS internships; the different levels of health care; and the regions of the country that lack these professionals<sup>37,38</sup>.

The results of this study showed that the insecurity about their professional future and the job market, which are typical in undergraduate students, place the public sector as a suitable opportunity for a job in the health area among the new graduates. However, such interest in the public service to start their careers, with later insertion in the private market, reveals a gap between the principles needed to take care of the population's oral health, which see health as a social product following SUS principles<sup>2</sup>. Therefore, SUS must favor the education of professionals for this area following its fundamental principles. To achieve this, from the beginning of their education, students must be inserted into SUS practical scenarios, with internship being implemented in a more systematic way<sup>36</sup>.

In this study, women showed greater interest in the public service when compared to men. Although the literature does not present many reports on this issue, this result was similar to that found among students starting the Pharmacy course at UEPG<sup>39</sup>. This raises some questioning regarding what is set in the literature in relation to health care practices. Since women tend to use more preventive services<sup>40</sup> and have shown more interest in courses in the health area, including dentistry<sup>14</sup>, this might give them more stability in the SUS care practices and greater visibility in the health care. However,

further studies are needed to deepen this discussion.

Although this study did not present association between the type of service desired and age, sex, family income, type of institution where high school was completed, city of origin, type of university entrance exam and type of vacancy applied for, the need for further studies is suggested to follow the same individuals and obtain additional information about the role of their qualification and formative inducing policies in the change of their perception of the public market over time.

This study shows some limitations such as the total number of participants that was reduced and despite working with all the students and having a high response rate, it might have been insufficient to evaluate the phenomenon since there were borderline results to accept the alternative hypothesis. However, we reinforce that the entrance in the dentistry course is annual and, therefore, the research groups has collected data in other classes to increase the number of participants and obtain greater statistical power. Moreover, the collection occurs soon after the start the course, so that the students have the least information possible about the qualification, which might have altered their initial perception of the course. It seems relevant to emphasize that the study has a cross-sectional design, which cannot be used to infer causality.

## CONCLUSION

The profile of students starting the Dentistry course at UEPG revealed that they are mostly women, single, without children, with a family income between 3 and 4 minimum wages, without own income, and originally from Ponta Grossa. Most of the freshmen came from high school private institutions, took the entrance exam called *vestibular* and did not use the vacancy reserve quotas. The main reason why they chose the course was professional fulfilment, followed by the fact that it was in the health area, and they would work with patients. A trend of change of the sociodemographic profile of the dentistry students in Brazilian public universities was observed due to the affirmative policies created. Most of the students reported interest in furthering their studies in postgraduate courses, including master's and doctoral programs. As regards the job market, they showed greater interest in the public service, mainly at the beginning of their careers. Women were more interested in the public sector than men, which demonstrates a change in the pattern of job market search in the dental area and greater interest in the public service.

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