The Burden of Debt for Canadian Dental Students: Part 2. A Report on Survey Participants and an Analysis of Dental Education Costs

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ABSTRACT

There are many anecdotes, but few facts about the issue of dental students’ debt in Canada. This second of a 4-part series about dental students’ debt attempts to remedy this situation. In January 2004, students at Canada’s 10 dental schools were invited to participate in a survey on costs, debt and other factors related to attending dental school in Canada. The survey provided previously inaccessible demographic information about levels of debt amongst dental students. A typical dental student respondent had completed 4 years of post-secondary education, was in first year of dental school, was single with no dependents, did not work outside of classes, lived in rented accommodation and walked to school. Reported costs to attend dental school varied widely among Canadian dental schools. Choice of school and year of study had a significant effect on overall costs of attending dental school.

MeSH Key Words: education, dental/economics; students, dental; training support/trends

Admission to dental school in Canada has always been competitive. Most successful applicants have completed at least 3 years of university studies with high academic marks and a strong score on the Dental Aptitude Test. Recently, tuition fees at most universities across Canada have increased substantially, particularly in professional programs such as dentistry. These increases have a significant impact on the educational experience of dental students, but limited empirical data on the overall effects of these increases exist. Tuition fees account for some of the financial burden on students, but other costs, such as accommodation and living expenses, textbooks, school supplies, instruments, clinic-related fees and transportation, often constitute an even greater percentage of overall expenditures. Clinic fees, in particular, are high. Unlike medical students who obtain their clinical training in hospitals already funded from the social tax-base, the costs of dental school clinics are borne partly by the students themselves.

In January 2004, students at Canada’s 10 dental schools were invited to participate in a survey of the costs, debt and other factors related to attending dental school in Canada. The study was supported by the deans of the schools, conducted by one of the authors (JNW) and the office of Planning and Institutional Research (PAIR) at the University of British Columbia (UBC), and funded by PAIR.
Table 1  Survey response rates for each dental school

<table>
<thead>
<tr>
<th>Dental school</th>
<th>Total no. of registered dental students ($n = 1,445$)</th>
<th>No. of respondents ($n = 613$)</th>
<th>Response rate (%)$^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta</td>
<td>139</td>
<td>62</td>
<td>44.6</td>
</tr>
<tr>
<td>British Columbia</td>
<td>178</td>
<td>79</td>
<td>44.4</td>
</tr>
<tr>
<td>Dalhousie</td>
<td>135</td>
<td>67</td>
<td>49.6</td>
</tr>
<tr>
<td>Laval</td>
<td>188</td>
<td>17</td>
<td>9.0</td>
</tr>
<tr>
<td>Laval</td>
<td>188</td>
<td>17</td>
<td>9.0</td>
</tr>
<tr>
<td>Manitoba</td>
<td>116</td>
<td>45</td>
<td>38.8</td>
</tr>
<tr>
<td>McGill</td>
<td>118</td>
<td>67</td>
<td>56.8</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>107</td>
<td>71</td>
<td>66.4</td>
</tr>
<tr>
<td>Toronto</td>
<td>256</td>
<td>114</td>
<td>44.5</td>
</tr>
<tr>
<td>Western Ontario</td>
<td>208</td>
<td>91</td>
<td>43.8</td>
</tr>
</tbody>
</table>

$^a$Results for the University of Montreal are excluded because of insufficient responses (only 1 student responded).

$^b$Overall response rate 42.4%.

This study was designed to yield measures of the total costs of attending dental school in Canada, examine the magnitude of debt accumulation for Canadian dental students, and explore how educational costs and related debt affect students' professional choices within dentistry. The first article in a series of 4 examined debt among dental students, both nationally and internationally. This second article describes the survey instrument and the methods used in the study, provides background information about survey participants, and reports on the factors influencing the costs of attending dental school. The second and third objectives are discussed in subsequent papers of the series.

Materials and Methods

The survey was developed by one of the authors (JNW) and student services staff at the faculty of dentistry, in conjunction with staff of PAIR, both at the UBC. The survey was reviewed by senior administrators at each dental school and translated into French by a staff member at the McGill University faculty of dentistry.

The design of the survey was based on simplified questionnaires used in Canada and the United States to investigate student financing issues (e.g., the Canada Millennium Scholarship Foundation$^2$). The survey was simplified for 3 reasons. First, only data on the costs associated with attending school were sought; data on expenditures that represent lifestyle choices and other factors unrelated to education were not collected. Second, simplified analysis of costs and expenditures was necessary because costs vary across dental schools. These costs include tuition fees, instrument fees or leasing, clinic fees, and photocopying or other expenses. This variability, coupled with differences in terminology across the country, results in complex cost breakdowns that could potentially confuse any estimate of the true total costs of a dental education. Therefore, the survey was designed to collect information on total educational costs, and cost differences were inferred with statistical analysis to avoid unnecessary complexity and reduce error. Third, because students derive income from 4 key sources (government loans, private loans, earned income and other resources), adding questions to investigate how students finance their education by other sources would complicate the survey design and data interpretation. Also an unnecessarily complex and long survey might deter participants from disclosing information.

Access to financial support for dental students is largely about borrowing because nearly all dental students in Canada need to borrow money to cover their expenses. This survey was designed to examine the relationships among costs, private debt, public debt, and access to funding from other sources, irrespective of the details of the other sources.

Representatives of Canada’s 10 dental schools all agreed to participate in the survey, and a draft of the survey instrument was circulated to contacts identified by the deans at each school. Separate information was sought from dental school staff or faculty about tuition fees. The survey instrument was refined after feedback from participating schools and the final web-based version, in both official languages, 48 questions in total, was posted in January 2004. Access was provided for all DMD and DDS students enrolled at dental schools across the country. The survey questions, as provided to respondents, are shown in Appendix A.

Potential student participants were informed about the survey and the URL by email, either directly from their dean’s office or from PAIR at UBC if the email addresses had been provided by the school. Students were assured
prize winner was later randomly selected from the participants at each dental school. Lastly, students were assured that completed surveys would go directly to PAIR at UBC and that no outside bodies, including dental schools or financial institutions, would have access to individual student information.

The survey was left open for 60 days and contacts at each dental school were asked to remind students once to complete the survey during that time period. Over the course of the collection of the data, it became apparent that response rates from Laval University and the University of Montreal were particularly low. The deans of both schools were asked to send a personal message to their students to encourage them to complete the survey.

Statistical analysis, primarily with simple descriptive statistics and multiple regression analysis, was undertaken with SPSS version 13 (SPSS Inc., Chicago, Ill.).

Results

Table 1 shows the survey response rates for each dental school. Because only 1 student responded from the University of Montreal, data for this school were excluded from the results. Similarly, although students completing international degree or qualifying programs accounted for 8% of respondents, their responses were also excluded from the analysis because they participate in only 2 years at each school and typically have pre-Canadian–dental school experiences that are quite different from those who are enrolled in a full 4-year DMD or DDS program. Although the total numbers of students invited to complete the survey was unclear for some universities, the overall response rate, based on the number of students registered in each program and the number who responded, was 42.4% ($n = 613$). The highest response rate was from Saskatchewan, whereas the lowest included in the analysis was from Laval.

Analysis of survey representation by school (Fig. 1) revealed a 15.8% spread between the university with the highest representation, Toronto, and the lowest, Laval.

The age of the highest percentage of respondents (17.9%) was 24 years (range 20 to 43 years) (Table 2). The sex distribution was almost equal (male 50.3%, $n = 308$; female 49.7%, $n = 305$). More than half (56%) of respondents were white; those categorized as “other visible minorities” represented 43% of the survey sample, and 3 (0.4%) respondents were aboriginal (Native Canadian). The largest group of respondents (29.5%) were in their first year of dental school at the time of the survey (Fig. 2), followed by second-year and third-year students in almost equal numbers. Just over a third of the respondents had completed 4 years of post-secondary studies before entering dental school (Fig. 3); slightly fewer had completed 3 years or less.

<table>
<thead>
<tr>
<th>Age (years) at time of survey</th>
<th>No. (%) of respondents ($n = 613$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>13 (2.1)</td>
</tr>
<tr>
<td>21</td>
<td>29 (4.7)</td>
</tr>
<tr>
<td>22</td>
<td>83 (13.5)</td>
</tr>
<tr>
<td>23</td>
<td>92 (15.0)</td>
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<td>24</td>
<td>110 (17.9)</td>
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<td>25</td>
<td>94 (15.3)</td>
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<tr>
<td>26</td>
<td>67 (10.9)</td>
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<td>27</td>
<td>42 (6.9)</td>
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<td>29</td>
<td>17 (2.8)</td>
</tr>
<tr>
<td>30</td>
<td>7 (1.1)</td>
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<tr>
<td>31</td>
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</tr>
<tr>
<td>32</td>
<td>8 (1.3)</td>
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<tr>
<td>33</td>
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<td>34</td>
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</tr>
<tr>
<td>35</td>
<td>3 (0.5)</td>
</tr>
<tr>
<td>36</td>
<td>2 (0.3)</td>
</tr>
<tr>
<td>37</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>38</td>
<td>2 (0.3)</td>
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<td>40</td>
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<tr>
<td>42</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>43</td>
<td>1 (0.2)</td>
</tr>
</tbody>
</table>
The majority (almost 80%) of participants were single (Fig. 4) and less than 10% had dependents (Table 3). Although most students did not work part-time while attending dental school, about 16% of respondents reported either working part-time or looking for part-time work (Fig. 5).

About half of the respondents lived in a rented home (Fig. 6) and about 20% lived with family or friends. Almost two thirds (63.4%) of participants lived more than 10 minutes away from school (Fig. 7), although the largest group (39.2%) reported walking to school (Fig. 8).

Tuition fees do not comprise the total cost of attending university. Other costs include books, laboratory fees, transportation, housing and food. For dental school students, clinic-related fees are typically high. Unlike medical schools where students can complete their clinical training in hospitals already funded through the social tax-base, dental schools usually have their own clinics, the costs of which are covered partially by the students themselves. The difference in median costs reported for dental students attending school, according to school and year of study, was $38,500 (range $52,000 [years 1 and 2 at Saskatchewan] to $13,500 [year 3 at Laval]) (Table 4). Multiple regression analysis, a statistical technique used to examine the relationship between variables, was used to investigate the impact of various factors on overall dental education costs (Table 5). The variables used to estimate total cost were “university,” “year of study,” and the interaction between the 2. Table 5 shows that almost 40% of the variation in the cost of attending dental school was due to variation among schools and year of study.
Table 4  Median reported total costs (Can$) for academic year 2003–2004

<table>
<thead>
<tr>
<th>School</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta</td>
<td>42,000</td>
<td>32,500</td>
<td>36,000</td>
<td>30,000</td>
</tr>
<tr>
<td>British Columbia</td>
<td>50,000</td>
<td>49,178</td>
<td>40,000</td>
<td>37,500</td>
</tr>
<tr>
<td>Dalhousie</td>
<td>30,000</td>
<td>33,518</td>
<td>31,755</td>
<td>30,000</td>
</tr>
<tr>
<td>Laval</td>
<td>20,000</td>
<td>20,000</td>
<td>13,500</td>
<td>14,000</td>
</tr>
<tr>
<td>Manitoba</td>
<td>31,000</td>
<td>35,000</td>
<td>35,000</td>
<td>22,500</td>
</tr>
<tr>
<td>McGill</td>
<td>15,000</td>
<td>40,000</td>
<td>25,000</td>
<td>25,500</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>52,000</td>
<td>52,000</td>
<td>47,000</td>
<td>41,000</td>
</tr>
<tr>
<td>Toronto</td>
<td>37,500</td>
<td>35,500</td>
<td>33,000</td>
<td>32,000</td>
</tr>
<tr>
<td>Western Ontario</td>
<td>38,000</td>
<td>37,250</td>
<td>35,500</td>
<td>35,000</td>
</tr>
</tbody>
</table>

*Total costs refer to the expenses self-reported by students attending dental school, including expenses for housing, tuition, food, clothing, debt serving, entertainment, etc., for the academic year 2003–2004 (see Appendix A, question 19).*

**Discussion**

A response rate of 42.4% is considered a satisfactory outcome for a web-based survey. This commonly used type of survey has advantages over paper-based or telephone surveys. Web-based surveys lower costs, save time, reduce coding errors and allow flexible design. For people accustomed to using computers (e.g., university students), a web survey can be more user-friendly than having to either fill out a paper survey and put it in the mail or spend time on the telephone, perhaps at an
inconvenient time, answering questions. The disadvantages of web surveys mostly relate to potential errors that are unlikely to occur with the current survey. For example, Umbach described “coverage error,” which arises when the researcher does not have accurate email addresses for all members of the population; “sampling error,” which occurs when some of the potential respondents do not have computer access; and “measurement error,” which results when computer-literate people are more willing to respond to a web survey than those less familiar with web technology. However, for this survey the population was relatively small and the dental schools had accurate contact information for their students. Further, most dental students were familiar with the Internet and the technology required to complete a web-based survey.

The response rate from students at the francophone Quebec universities [University of Montreal (1 response) and Laval (17/613, or 9%)] was well outside the response range of that of the other dental schools (range 38.8% to 66.4%) (Table 1). While the low response rate at these Quebec schools might initially be ascribed to decreased financial concerns as a result of relatively low tuition fees, together with adequate provincial government loans, the much higher response rate from McGill University in Montreal (56.8%) indicates the likelihood that other factors were in play. It is possible that information about the survey was not communicated to students at the University of Montreal or Laval within the time that it was available online. Other possible explanations would require more detailed information about the differences between these schools and the other 8 schools participating in this study.

Table 2 shows that almost 75% of respondents were between 22 and 26 years of age in 2004, suggesting that dental schools typically attract younger students: only 5.6% of the respondents indicated that they had dependents (Table 3). Sex and racial data for the current study were broadly similar to recent findings for the 2003 graduating class in the United States.

In many countries, dental students are able to enrol in dental school directly from high school (secondary education) and can expect to commence dental studies at age 18. This has the advantage of avoiding debt accumulated in a 3-year degree program before entering dentistry. Minimum entry requirements to Canadian dental schools are given in Table 6. The professional schools of most Quebec universities are modelled after those of European universities, whereas McGill is more like other Canadian schools. In reality, very few students are admitted to Quebec dental schools without 2 years of college studies (Diplôme d’études collégiales) because entry to dental school is very competitive. Instead, most students enrol in a pre-med or pre-dentistry program and may spend 1 or more years in these programs before gaining admission to dental school.

An investigation of the representativeness of the sample and the potential for response bias is justified. There were concerns about the confidentiality and

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>p value</th>
<th>Partial eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected model</td>
<td>41895569231.805a</td>
<td>35</td>
<td>1197016263.766</td>
<td>10.413</td>
<td>0.000</td>
<td>0.390</td>
</tr>
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<td>1</td>
<td>454738131161.152</td>
<td>3955.803</td>
<td>0.000</td>
<td>0.874</td>
</tr>
<tr>
<td>Q1: University currently attended</td>
<td>25029726307.171</td>
<td>8</td>
<td>3128715788.396</td>
<td>27.217</td>
<td>0.000</td>
<td>0.277</td>
</tr>
<tr>
<td>Q4: Year of study in dental program</td>
<td>2889194836.938</td>
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<td>963064945.646</td>
<td>8.378</td>
<td>0.000</td>
<td>0.042</td>
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<tr>
<td>Q1 * Q4</td>
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<td>387428468.418</td>
<td>3.370</td>
<td>0.000</td>
<td>0.124</td>
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<tr>
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<td>114954698.385</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
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</tr>
<tr>
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<td>604</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^\text{a}R^2 = 0.390\) (adjusted \(R^2 = 0.353\))

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Matthew

Table 5 Multiple regression analysis of total cost (university, year of study and interaction between them)
logistics associated with the administration of the survey over the Internet, and central collection of the sampling frame was not possible. Using data from UBC to provide evidence of sample representativeness (Table 7) reveals that students in first year at UBC were over-represented relative to those in fourth year. First-year students comprised about a third of the UBC survey subgroup, whereas first-year students in the UBC faculty of dentistry actually made up less than a quarter of the DMD student body. In comparison, only about 15% of the UBC survey respondents were in fourth year, but the actual percentage of fourth-year UBC dental students was 26.4%. At UBC significant differences were reported for total fees, including tuition, clinic fees and all faculty- and university-based incidental fees, paid by first-year ($37,321.16) and fourth-year ($19,259.16) students. It can be inferred either that first-year students were more likely to respond to the survey because they paid higher fees or that they were simply more motivated than students in later years of study to participate in surveys. This information, although indicative of a possible sampling bias, fortunately, does not affect the types of analysis presented here because the variables of costs and year of study were controlled for.

As shown in Table 4, overall costs for all dental students surveyed exceeded tuition fees by a considerable amount. In fact, costs were well in excess of students’ combined living costs and tuition. One way to consider costs is described in this equation: total cost – living cost = burden of cost to dental students. Using Year 1 costs at UBC as an example, we get the following: $50,000 (median total cost) – $10,000 (approximated living cost) = $40,000 (burden of cost to UBC dental students). In the case of UBC’s dental program, this model proves to be quite valid; the faculty’s website indicates that the 2004–2005 costs for first-year students totalled $36,333.41.

Table 4 also highlights the considerable cost variability of dental programs throughout Canada, the result of tuition and other cost differences across the country. The regression analysis presented in Table 5 shows the impact of various cost factors on the overall costs of

Table 6 Minimum entry requirements to Canadian dental schools

<table>
<thead>
<tr>
<th>School</th>
<th>Minimum post-secondary education required for admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta</td>
<td>60 credits/10 full courses (= 2 full years)</td>
</tr>
<tr>
<td>British Columbia</td>
<td>90 credits/3 full years</td>
</tr>
<tr>
<td>Dalhousie</td>
<td>3 full years</td>
</tr>
<tr>
<td>Laval</td>
<td>2 years of college studies (DEC)</td>
</tr>
<tr>
<td>Manitoba</td>
<td>60 credits/2 full years</td>
</tr>
<tr>
<td>McGill</td>
<td>Final year of undergraduate (3 full years); prefer completion of an undergraduate degree</td>
</tr>
<tr>
<td>Montreal*</td>
<td>Must complete DEC (CEGEP) or have 48 credits (= 2 full years)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>60 credits (= 2 full years)</td>
</tr>
<tr>
<td>Toronto</td>
<td>3 full years/15 full-year courses</td>
</tr>
<tr>
<td>Western Ontario</td>
<td>Final year of undergraduate (3 full years); prefer completion of an undergraduate degree</td>
</tr>
</tbody>
</table>

DE = Diplôme d’études collégiales
\*Data derived from Canadian dental school websites.

Table 7 Sample representation by year of study from UBC data

<table>
<thead>
<tr>
<th>Year of study</th>
<th>Total no. of dental students (n = 178)</th>
<th>Proportion of students by year of study (%)</th>
<th>No. of UBC respondents to survey (n = 79)</th>
<th>UBC response rate to survey (%)</th>
<th>Breakdown by year of study of UBC respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
<td>22.5</td>
<td>27</td>
<td>67.5</td>
<td>34.2</td>
</tr>
<tr>
<td>2</td>
<td>39</td>
<td>21.9</td>
<td>18</td>
<td>46.2</td>
<td>22.8</td>
</tr>
<tr>
<td>3</td>
<td>52</td>
<td>29.2</td>
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<tr>
<td>4</td>
<td>47</td>
<td>26.4</td>
<td>12</td>
<td>25.5</td>
<td>15.2</td>
</tr>
</tbody>
</table>

UBC = University of British Columbia
attending dental school. In this case, the regression analysis used 3 variables to estimate total cost: university, year level, and the interaction between university and year level. This analysis fitted a simple model to the cost data, describing the total cost as a linear function of university, year of study, and the interaction between the 2. This model enabled quantification of the extent to which costs varied across the country solely as a result of different tuition and other cost policies. It also provided a basis for a more complex model, permitting further study of factors that might influence costs.

The rationale for using regression analysis is that, although many factors may influence the dependent variable of interest (such as costs or debt), only a few key factors systematically explain some of the variation in the dependent variable. For example, researchers have found that the total costs of an education are difficult to summarize in a useful manner because every respondent reports different costs. The average cost does not explain why the costs differ. However, a broad survey collects information on other factors such as living arrangements, transportation, year of study, program and university. The use of regression analysis makes it possible to determine the role of each of these variables in the total cost.

Regression analysis allocates a numerical value to the contribution to costs made by each of these variables, as well as the importance of each of these variables in explaining cost. For example, does the wide variation in fees really reflect serious differences in costs, or simply differences in the ways each university reports its fees since some include clinic-related fees and others do not? Is there any difference in costs related solely to students living away from home, after all other factors are controlled for? Regression analysis permits evaluation of the impact of a specific variable, while all other variables are controlled for.

The regression model in Table 5 shows that almost 40% of the variation in the cost of attending dental school was due to the variation among schools and year of study. This has 2 clear implications. First, when all costs are considered together, there were significant differences in the costs of attending different dental schools across the country. Second, while costs do not necessarily increase with year of study, the strong effect size shown by the interaction term confirms that at some universities, the change in tuition costs over the last 4 years was large (e.g., UBC) and at others, specific high-cost items affected the students in a particular year.

Financing a program in dentistry must take into account this uneven cost structure on a university-by-university basis. The unevenness is accentuated by scholarships that favour students whose place of residence is in the same province where they attend dental school, for example, the 15 University of Saskatchewan scholarships available to students who meet the residency requirement. If there are more than 15 Saskatchewan students admitted to the first-year class of 28, the students are ranked and the scholarships given to the 15 most qualified students. The scholarship program and concomitant increase in tuition started in 1999 when the value of the scholarship offered was $17,225. In 2000, the scholarship increased to $18,000.

Although students completing international degree or qualifying programs accounted for 8% of respondents (n = 51), we excluded this group from the analysis because of their unique prior experience of dentistry and because their financial circumstances are typically different from those of Canadian students. We recognize that these students can ultimately make a significant contribution to the nation’s economy upon graduation and share an equal, if not greater, burden of debt compared with that of dental students of Canadian origin. Future studies will focus on the debt experience of international students. It would also be useful to analyze equity issues for foreign dental students in Canada (e.g., whether foreign students are obliged to return to their homeland or whether they may seek citizenship after graduation).

Conclusions

The response rate for this web-based survey was satisfactory. A typical respondent had completed 4 years of post-secondary education, was in first-year dental school, was single with no dependents, did not work outside of classes, lived in rented accommodation, and walked to school. Variation in the reported costs to attend Canadian dental schools was marked. The choice of university attended by dental students and the year of study in the dental program had the greatest impact on the overall costs of attending dental school.

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The authors have no declared financial interests.

References


Appendix A  The questions in the online survey on dental student debt

Tell us about yourself

1. What university are you currently attending?
   a. University of Alberta
   b. University of British Columbia
   c. Dalhousie University
   d. Universite Laval
   e. University of Manitoba
   f. McGill University
   g. Universite de Montreal
   h. University of Saskatchewan
   i. University of Toronto
   j. University of Western Ontario

2. What is your age?

3. Are you in an International Degree Completion or Qualifying Program?
   a. No
   b. Yes

4. Please indicate your year in the dental program:
   a. Year 1
   b. Year 2
   c. Year 3
   d. Year 4

5. How many years of post-secondary education did you have prior to Dental School?
   a. 3 or less
   b. 4
   c. 5
   d. 6
   e. 7 or more

6. What is your sex?
   a. Male
   b. Female

7. What is your marital status?
   a. Single
   b. Married
   c. Cohabitating
   d. Legally Separated
   e. Divorced

8. In addition to dental school, do you have a job?
   a. Yes, I have a job.
   b. No, I'm not working.
   c. No, but I'm looking for a job.

9. How many dependents do you have?

10. Where do you live?
    a. In a home you own
    b. In a home you rent
    c. With family or friends in their home
    d. On campus housing (residence/apartment)
    e. Room in a fraternity or sorority house
    f. Other
11. How long does it typically take you to commute to school?
   a. on-campus
   b. 10 minutes or less
   c. 10-20 minutes
   d. 20-30 minutes
   e. 30-60 minutes
   f. more than an hour

12. What mode of transportation do you most often use to travel to school?
   a. Walk
   b. Cycle
   c. Public
   d. Transit
   e. Carpool
   f. Drive own Vehicle

**Financial situation: debt**

Before you began Dental School, how much debt remained from previous post-secondary education? (Please answer '0' if none).

13. Previous amount of Government Student Loan debt:

14. Previous amount of other debt incurred to allow you to pursue your education (loans, line of credit, etc):

**Currently, how much do you owe? (Please enter '0' if none)**

15. Current amount of Government Student Loan debt (include past unpaid and currently accrued):

16. Current amount of other debt incurred to allow you to pursue your education (loans, line of credit, etc):
   By the time you graduate from Dental School, how much total debt do you anticipate? (Please enter '0' if none)

17. Projected amount of Government Student Loan debt (include past and present unpaid, and expected future debt):

18. Projected amount of other debt incurred to allow you to pursue your education (loans, line of credit, etc):

**Financial situation: budget for current year**

19. Please estimate your total expenses for the current academic year (all expenses: include housing, tuition, food, clothing, debt serving, entertainment, etc.)
   To pay for these expenses for the current academic year, how much will you be spending from the following sources of income?

20. Scholarships, bursaries, or other non-repayable awards.

21. Government Student Loans

22. Additional debt (loans, lines of credit, etc)

23. Personal resources (employment income, savings, sales of assets, return on investments, gifts from family/friends, etc.)

24. If your sources of funding do not equal your projected expenses, you will have a shortfall for the current year. How will you address this challenge? I do not have a shortfall.
   a. I will increase my debt even further.
   b. I will withdraw from Dental School.
   c. I will reduce my anticipated total expenses.
   d. I will get a new job / higher pay.
   e. I don’t know what I will do yet.
Your career path

25. We are interested in the extent to which various factors influenced your decision to enter Dentistry. How important are each of the following aspects of your choice to pursue Dentistry?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not very important</th>
<th>Not a factor</th>
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<tbody>
<tr>
<td>My interests are in the health and medical field</td>
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<tr>
<td>Good job opportunities (available jobs, security)</td>
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<td>Desire to be self employed</td>
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<td>Dentistry fits well with my skill set</td>
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<tr>
<td>Good earnings potential</td>
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<tr>
<td>I find dentistry very interesting</td>
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<tr>
<td>Dentistry was a good alternative to my first choice of profession</td>
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<tr>
<td>Other (please specify below)</td>
<td></td>
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</tr>
</tbody>
</table>

26. If you answered “other” above, please specify here: please limit your response to 255 characters or less (about 40 words maximum).

27. When you made the decision to accept the offer of admission to dental school, which statement best describes how aware you were of the costs you would eventually encounter in the program?
   a. Costs have been significantly higher than I anticipated.
   b. Costs have been about what I expected.
   c. Costs have been lower than what I initially expected.
   d. I didn’t really have much of an idea of costs of the program when I entered.

28. Given what you now know about the costs of the program and your potential earnings, which best describes how your decision may have been different:
   a. I probably would still have entered the program.
   b. I probably would not have entered the program.
   c. I don’t know how I would have responded to this information.
   d. My initial knowledge about costs and earnings has not changed.

29. Please indicate the career paths you are considering upon graduation (choose as many as apply):
   a. Pursue research-focused graduate studies in Dentistry or a related area.
   b. Pursue a General Dentistry residency or internship
   c. Pursue specialty training in Dentistry
   d. Pursue a career in Academic Dentistry (e.g. teach and do research in a dental school)
   e. Pursue a career in General Dentistry Private Practice
   f. Pursue a career in Specialty Private Practice
   g. Pursue a salaried position in Community Dentistry
   h. Pursue a career in Military Dentistry, in exchange for having my education costs subsidized
   i. Other (please specify)

30. If you answered “other” above, please specify here: please limit your response to 255 characters or less (about 40 words maximum).
31. Did the level of debt you anticipate having upon graduation influence your career path choice(s)? No, as I do not expect to have a high level of debt upon graduation (proceed to Q.34)
   a. No, as my debt level will not influence my career choices--I will pursue my goals regardless (proceed to Q.34)
   b. Yes, my debt level definitely influences my career choices.

32. If debt level were not a factor in your decision, would you have preferred any of the following career paths? (Choose as many as apply)
   a. Pursue research-focused graduate studies in Dentistry or a related area.
   b. Pursue a General Dentistry residency or internship.
   c. Pursue specialty training in Dentistry.
   d. Pursue a career in Academic Dentistry (e.g. teach and do research in a dental school).
   e. Pursue a career in General Dentistry Private Practice.
   f. Pursue a career in Specialty Private Practice.
   g. Pursue a salaried position in Community Dentistry.
   h. Pursue a career in Military Dentistry, in exchange for having my education costs subsidized.
   i. Other.

33. If you replied “other” above, please specify here: please limit your response to 255 characters or less (about 40 words maximum).

34. Dentistry offers opportunities to engage in volunteer work or work of a public service nature at low remuneration (community outreach, part-time teaching at a dental school, etc.). How likely is it that you will devote some of your professional time to such options?
   a. Very likely
   b. Somewhat likely
   c. Not likely

35. Would you devote more time to such volunteer activities if you had a lower level of student related debt?
   a. No, as I do not expect to have a high level of debt.
   b. No, my debt level will not influence decisions about volunteering.
   c. Yes, my debt level will definitely influence my ability to volunteer.

Activity during summer

36. What type of activity did you participate in last summer? (Choose as many as apply)
   a. Paid research
   b. Unpaid research
   c. Required education
   d. Elective education
   e. Personal Travel
   f. Volunteer Work
   g. Paid Employment
   h. Other (please specify below)

37. If you replied “other” above, please specify here: please limit your response to 255 characters or less (about 40 words maximum).

Tell us about your background

38. What is your ethnicity/racial background?
   a. Caucasian
   b. Aboriginal (Native Canadian)
   c. Other Visible Minority

39. What is the highest education level achieved by your mother?
   a. Elementary
   b. Some High
   c. Completed High
   d. Trade/Vocational
   e. Post-Secondary Certificate or Diploma
   f. Bachelor’s Degree
   g. Master’s Degree
   h. Professional or Doctorate
40. What is the highest education level achieved by your father?
   a. Elementary
   b. Some High
   c. Completed High
   d. Trade/Vocational
   e. Post-Secondary Certificate or Diploma
   f. Bachelor's Degree
   g. Master's Degree
   h. Professional or Doctorate

41. How would you categorize your mother's primary occupation (current, or prior to retirement/death)?
   a. Labourer
   b. Sales or Service
   c. Clerical
   d. Professional
   e. Self-Employed
   f. Owner/Manager
   g. Not employed

42. How would you categorize your father's primary occupation (current, or prior to retirement/death)?
   a. Labourer
   b. Sales or Service
   c. Clerical
   d. Professional
   e. Self-Employed
   f. Owner/Manager
   g. Not employed

43. If your Mother is still employed (or pensioned), what is her annual pre-tax income?
   a. Under $15,000
   b. $15,001 to $20,000
   c. $20,001 to $30,000
   d. $30,001 to $40,000
   e. $40,001 to $50,000
   f. $50,001 to $60,000
   g. $60,001 to $70,000
   h. $70,001 to $80,000
   i. $80,001 to $90,000
   j. $90,001 to $100,000
   k. $100,001 or more
   l. Unknown

44. If your Father is still employed (or pensioned), what is his annual pre-tax income?
   a. Under $15,000
   b. $15,001 to $20,000
   c. $20,001 to $30,000
   d. $30,001 to $40,000
   e. $40,001 to $50,000
   f. $50,001 to $60,000
   g. $60,001 to $70,000
   h. $70,001 to $80,000
   i. $80,001 to $90,000
   j. $90,001 to $100,000
   k. $100,001 or more
   l. Unknown
45. In what town or city did you attend high school? *please limit your response to 255 characters or less (about 40 words maximum).*

46. In what province (or country, if not Canada) did you attend high school? *please limit your response to 255 characters or less (about 40 words maximum).*

47. In what province (or country, if not Canada) did you attend high school? *please limit your response to 255 characters or less (about 40 words maximum).*

48. Is there anything else that you would like to share with us? *please limit your response to 255 characters or less (about 40 words maximum).*