## BRIEF REPORT

## MATRICULATING STUDENT SURVEY 2013 Indebtedness

Author: Zachary Britt
Contributors: Anthony A. Miller, MEd, PA-C, Lindsey M. Huang, MA, and Rachel Hamman

## OVERVIEW

The 2013 Matriculating Student Survey (MSS) obtained information from firstyear physician assistant (PA) students to improve education, recruitment, and retention. The survey, conducted by the Physician Assistant Education Association (PAEA), was based on a previous student survey administered in collaboration with the American Academy of Physician Assistants. The survey also included items from the Association of American Medical Colleges' Matriculating Student Questionnaire and the Higher Education Research Institute's College Senior Survey. A human subjects review determined that the study was exempt from Institutional Review Board approval.

The survey was mailed to 172 PAEA member program directors in September 2013. Program directors were requested to forward an email and survey link to their firstyear class. In order to achieve an adequate response rate, PAEA research staff sent reminder emails to non-responding programs, conducted follow-up phone calls through December 2013, and offered various incentives to programs that achieved at least a $50 \%$ response rate. Following the identification of duplicate cases, the survey yielded 4,197 unique responses. Based on data from the PAEA 2013 Annual Program Survey, the estimated response rate for the 2013 MSS was $52 \%$.

## NON-PA EDUCATION DEBT

Slightly fewer than half of the responding students (49.4\%) reported having existing educational debt from prior to entering the PA program. The average amount of outstanding educational loans reported was $\$ 40,629$ ( $\mathrm{SD}=\$ 35,437, \mathrm{n}=1,797$ ), with a median of $\$ 30,000$.

## \$58,522

Average debt from non-education

Students were asked to describe how their college/pre-PA education costs were paid, and then entered a percentage for a list of applicable sources. Figure 1 displays the average profile of the methods that matriculants used to finance non-PA education.

Figure 1. Typical Profile of Financing Non-PA Education 30


Forty-nine percent of respondents indicated holding an average of \$58,522 in non-education debt (Median $=\$ 12,000, S D=\$ 99,784, n=1,319$ ), including credit card debt, car loans, mortgages, and other consumer debt. Table 1 shows respondents' estimated consumer debt.

Table 1. Outstanding Non-Educational Consumer Debt

| Type of Outstanding Debt | $\mathbf{n}$ | $\mathbf{M}$ | SD | Median |
| :--- | :---: | :---: | :---: | :---: |
| Mortgages | 395 | $\$ 164,333$ | $\$ 114,941$ | $\$ 143,000$ |
| Car loans | 619 | $\$ 12,621$ | $\$ 8,817$ | $\$ 10,000$ |
| Credit cards | 739 | $\$ 4,756$ | $\$ 5,734$ | $\$ 3,000$ |
| Other consumer debt | 76 | $\$ 12,532$ | $\$ 17,185$ | $\$ 5,500$ |

Total amount of debt that $39 \%$ of matriculants expect to exceed from attending PA school

## DEBT FROM PA EDUCATION

Three-quarters ( $75.3 \%$ ) of responding students anticipated their total debt (excluding personal debt) from attending PA school to be at least \$50,000; 39\% of matriculants expected their total debt from attending PA school to exceed \$100,000.

Students expected to finance an average of $63 \%$ of their PA educational costs through student loans. Figure 2 illustrates the average profile of the methods that matriculants plan to use to finance their PA education.

Figure 2. Typical Profile of Financing PA Education


## GENDER, ETHNICITY, AND RACE

Female students reported a slightly higher average existing educational debt ( $\mathrm{M}=$ $\$ 40,897, S D=\$ 35,407, n=1,273$ ) than males ( $M=\$ 39,516, S D=\$ 35,026$, $\mathrm{n}=514$ ). However, this difference was not statistically significant. When considering anticipated debt from PA school, both female and male matriculants anticipated similar levels of debt, with the highest rates of respondents expecting between \$75,000 and \$124,999 (38.9\% and 43.1\%, respectively).

Non-Hispanic, Latino, or Spanish respondents reported a higher average existing educational debt ( $\mathrm{M}=\$ 40,888, \mathrm{SD}=\$ 35,218, \mathrm{n}=1,629$ ) than Hispanic, Latino, or Spanish respondents ( $\mathrm{M}=\$ 36,646$, $\mathrm{SD}=\$ 34,217, \mathrm{n}=134$ ). Neither this difference nor differences in anticipated debt between these two groups were statistically significant.

Table 2 compares matriculants' existing educational debt by race. Native Hawaiian or Pacific Islanders reported the highest levels of existing educational debt, while American Indian or Alaskan Natives reported the lowest levels. The differences in existing educational debt by race were not statistically significant.
Table 2. Existing Educational Debt by Race

| Type of Outstanding Debt | $\mathbf{n}$ | $\mathbf{M}$ | SD | Median |
| :--- | ---: | ---: | ---: | ---: | ---: |
| White | 1,525 | $\$ 40,737$ | $\$ 34,375$ | $\$ 30,000$ |
| Asian | 90 | $\$ 38,732$ | $\$ 41,321$ | $\$ 25,500$ |
| Black or African American | 67 | $\$ 43,791$ | $\$ 40,436$ | $\$ 31,000$ |
| Native Hawaiian or Other Pacific Islander | 12 | $\$ 47,833$ | $\$ 32,409$ | $\$ 55,000$ |
| American Indian or Alaskan Native | 9 | $\$ 15,767$ | $\$ 11,602$ | $\$ 15,000$ |
| Other | 43 | $\$ 40,074$ | $\$ 42,337$ | $\$ 30,000$ |

Table 3 shows respondents' anticipated debt from PA school by race. There appeared to be some variation in the levels of anticipated debt, e.g., a greater proportion of American Indian or Alaskan Native respondents expect lower levels of debt than their peers. Despite these variations, there were no statistically significant differences.

Table 3. Anticipated Debt From Attending PA School by Race

| Level of Debt | White $(\mathrm{n}=3,259)$ | Black or AfricanAmerican ( $\mathrm{n}=106$ ) | Asian $(\mathrm{n}=281)$ | Native Hawaiian or Other Pacific Islander ( $\mathrm{n}=20$ ) | American Indian or Alaskan Native ( $\mathrm{n}=29$ ) | Other $(n=103)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$0 | 7.6\% | 3.8\% | 10.3\% | 5.0\% | 6.9\% | 8.7\% |
| \$1-\$49,999 | 16.1\% | 23.6\% | 18.9\% | 25.0\% | 37.9\% | 21.4\% |
| \$50,000-\$99,999 | 36.5\% | 34.0\% | 36.3\% | 35.0\% | 27.5\% | 32.0\% |
| \$100,000-\$149,000 | 30.8\% | 32.1\% | 24.9\% | 20.0\% | 20.7\% | 26.2\% |
| \$150,000-\$199,999 | 6.9\% | 3.7\% | 6.4\% | 15.0\% | 6.8\% | 9.7\% |
| \$200,000 and greater | 2.0\% | 2.8\% | 3.2\% | 0.0\% | 0.0\% | 1.9\% |

## PRE-PA VS. DIRECT ADMIT STUDENTS

Students completing a pre-professional phase prior to entering the professional phase of the program had a higher average existing debt of $\$ 44,538$ ( $\mathrm{SD}=\$ 31,631, \mathrm{n}=138$ ), whereas students who directly entered the professional phase of the program reported an average existing debt of \$40,242 ( $\mathrm{SD}=\$ 35,700, \mathrm{n}=$ $1,655)$. This difference was not statistically significant. However, as shown in Table 4, there was a significant association between the respondent's track into a PA program and their anticipated debt from PA school. These data suggest that matriculants who enter a pre-professional phase prior to entering the PA program anticipate accruing significantly less debt from their PA education than matriculants who did not enter a pre-professional phase.

# There was a SIGNIFICANT association between the respondent's track into a PA program and their anticipated debt from PA School. 

## DEBT AND PARENTS' LEVEL OF EDUCATION

To examine the role that current or past socioeconomic status might play in determining the level of debt that PA students incur, respondents' existing and anticipated debt were compared to their parents' level of education. In both comparisons, statistically significant differences were found.

Figure 3 shows the relationship between a matriculant's existing debt and their parents' level of education; there was a significant association between these two variables. Specifically, students whose parents had a professional doctorate had significantly higher levels of existing debt than students whose parents had some college, a baccalaureate degree, or a master's degree.

Table 4. Anticipated Debt from Attending PA School by Pre-PA or Direct Admission Status

| Level of Debt | Pre-PA | Direct <br> Admission |
| :--- | ---: | ---: |
| $\$ 0$ | $11.1 \%$ | $7.6 \%$ |
| $\$ 1-\$ 49,999$ | $29.0 \%$ | $16.0 \%$ |
| $\$ 50,000-\$ 99,999$ | $35.1 \%$ | $36.2 \%$ |
| $\$ 100,000-\$ 149,999$ | $17.6 \%$ | $30.8 \%$ |
| $\$ 150,000-\$ 199,999$ | $5.8 \%$ | $7.2 \%$ |
| $\$ 200,000$ and greater | $1.4 \%$ | $2.2 \%$ |

Figure 3. Existing Educational Debt by Parents' Level of Education


Table 5 compares respondents' anticipated debt from PA school and their parents' level of education. There was a significant relationship between parents' level of education and respondents' anticipated debt from PA school. These data suggest that a significantly larger proportion of matriculants whose parent(s) has/have an academic or professional doctorate anticipate lower levels of debt from attending PA school compared to matriculants whose parent attained lower levels of education.

Table 5. Anticipated Debt From Attending PA School by Parental Level of Education

| Debt | Some High School ( $\mathrm{n}=134$ ) | High School Diploma ( $\mathrm{n}=571$ ) | Some College ( $\mathrm{n}=475$ ) | Associate's Degree ( $\mathrm{n}=343$ ) | Baccalaureate Degree ( $\mathrm{n}=1,239$ ) | Master's Degree $(\mathrm{n}=769)$ | Academic Doctorate $(\mathrm{n}=88)$ | Professional Doctorate ( $\mathrm{n}=296$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$0 | 6.7\% | 5.1\% | 5.3\% | 5.5\% | 7.5\% | 8.5\% | 12.5\% | 18.9\% |
| \$1-\$49,999 | 29.1\% | 16.4\% | 15.5\% | 15.2\% | 16.4\% | 17.0\% | 20.4\% | 17.6\% |
| \$50,000-\$99,999 | 29.1\% | 37.5\% | 36.0\% | 34.1\% | 37.8\% | 37.2\% | 31.8\% | 31.8\% |
| \$100,000-\$149,000 | 24.6\% | 29.7\% | 34.1 \% | 35.0\% | 29.9\% | 28.3\% | 29.6\% | 23.3\% |
| \$150,000-\$199,999 | 8.2\% | 8.9\% | 7.1\% | 8.2\% | 6.3\% | 6.5\% | 3.4\% | 6.8\% |
| \$200,000 and greater | 2.2\% | 2.3\% | 1.9\% | 2.0\% | 2.0\% | 2.5\% | 2.3\% | 1.7\% |

## THE EFFECT OF DEBT ON FINANCIAL CONCERNS AND FUTURE PRACTICE

Respondents were asked to consider and rate their financial concerns in the past week on a 10 -point scale, with 1 representing "as bad as it can be," and 10 representing "as good as it can be." For analysis, this scale was collapsed into three categories, with responses of 1-3 corresponding to "low" financial concern, 4-7 corresponding to "moderate" financial concern, and 8-10 corresponding to "high" financial concern. There was a significant relationship between matriculants' existing educational debt and reported levels of financial concern. As expected and illustrated in Figure 4, students who reported a high level of financial concern had a significantly higher average of existing debt than students who reported a low level of financial concern.

As Figure 5 illustrates, there was a similar relationship found between financial concern and anticipated debt; respondents who anticipated higher debt, reported high levels of financial concern.

Figure 4. Respondents' Financial Concern by Exisiting Educational Debt


Level of Financial Concern

When asked about their career path following the completion of the PA program, $87.5 \%(n=3,463)$ of respondents indicated that the ability to pay off debt was either "very important" or "essential." Additionally, 71.6\% of students ( $n=2,830$ ) reported that a high-income potential was "very important" or "essential," and 94.3\% ( $n=3,719$ ) indicated that a stable, secure future was "very important" or "essential."

Figure 5. Respondents' Financial Concern by Anticipated Debt - Low Moderate High


To learn more about how debt may factor into a student's decision to practice in primary care, students' existing and anticipated debt was examined by their intent to practice in a primary care specialty. In both instances, there was no significant association between the levels of debt and a respondent's intention to practice in primary care.

## CONCLUSION

PA student debt appears to be influenced by a diverse set of factors, including whether or not a matriculant entered PA education through a pre-professional track, as well as their parents' level of education. Additionally, high levels of existing or anticipated debt may have an impact on a student's well-being. This is an area for further study. Additional research is needed to determine if existing and anticipated debt influences career choices.

One of the limitations of this report is the number of matriculating students who responded to the survey after being enrolled in a PA program for a month or longer. Despite a robust response rate, it is unclear if the data adequately represent the entire PA student population for the 2013 cohort, as some respondents did not take the survey at or near the time of matriculation. This limitation was resolved in 2014, as the survey is now administered to programs in the month they matriculate a first-year class.

