

The Toll of Student Debt: Stress Among Health Professions Students and the Promising Role of Financial Self-Efficacy on Career Choices

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Introduction. As the cost of higher education rises, the debt associated with degree attainment also increases, including that of the Doctor of Physical Therapy degree. Research suggests that a relationship between financial debt and post-professional career aspirations may exist, and financial self-efficacy could attenuate debt-related stress. These relationships have not been studied in the health professions outside of medicine.

Methods. A total of 139 participants among 6 health professions programs housed in one public, academic medical center were surveyed. Surveys administered to participants provided Likert scale data for a multiple regression analysis.

Results. Eighty-one percent of students reported having a medium, large, or

extreme amount of stress from the total amount of debt they are accruing. More than 70% of student responses indicated that the amount of student loan debt they expect to accumulate will influence their posttraining career selection to some extent. The regression model indicated some predictive ability of stress from student debt. Two of the covariates, self-efficacy and career selection, were statistically significant. Self-efficacy accounted for 36% of the variance explained in students' self-reported stress from debt by itself. Students' career selection and stress were strongly associated, with career selection explaining 85% of the variance explained in students' self-reported stress by itself.

Discussion. Health professions students in a public academic medical center had a "medium amount" of stress, on average, from financial debt. Stress was associated with the amount of student loans students expect to accrue and their financial self-efficacy. Students also appeared to base their postprofessional career aspirations, at least in part, on the stress they experienced from financial debt. Financial self-efficacy appears to be a promising moderator for debt-related stress.

Conclusion. Stress appears to be associated with higher student loan debt, but financial self-efficacy may moderate this trend.

Level of Evidence. IV, Cross-sectional descriptive survey design.

What Is Known About the Subject? Costs of physical therapy programs continue to rise, requiring more physical therapy students to use loans to pay for their education. Other professions, including medicine, have noted that student loan debt can cause high amounts of stress and has the potential to influence career choices.

What This Study Adds to the Existing Literature? Health professions students in one academic medical center appear to base their postprofessional career aspirations, at least in part based on the stress they experience from financial debt.

Financial self-efficacy appears to attenuate the amount of stress students feel from student loan debt.

Key Words: Student loans, Self-efficacy, Loan debt, Education, Health professions, Financial stress, Career choice.

INTRODUCTION

Student debt continues to rise for those pursuing graduate degrees in the health professions. In 2004, 36% of professional doctoral students graduated with \$80,000 or more in debt and 11% graduated with \$120,000 or more. By 2012, those figures rose to 70% of students with \$80,000 or more of debt and 54% with \$120,000 or more.¹ With rising student loan debt, it is possible that the financial costs of professional degrees could eventually outweigh the benefits of pursuing a career in health care.

As an example of high costs, in 2019, the average total cost for a doctorate of Physical Therapy (DPT) degree in a public university was \$65,170, whereas degrees from private universities were \$112,714 (both figures excluding room and board).² These figures do not include the cost of an undergraduate degree or additional prerequisite coursework that are required for entry into DPT programs. By contrast, the average physical therapist salary for those with 0–3 years' experience was \$67,000 in 2016.³

Physical therapy students in 2011 were graduating with an average of \$83,000 in loan debt.⁴ Physical therapy students who take out student loans to cover the cost of their professional degrees may face economic hardship after graduation. Pabian et al⁵ found that those physical therapy students who had \$120,000 or more in student debt upon graduation were likely to face economic hardship into their early careers because they would be expected to contribute 20% or more of their monthly incomes to student loan repayment.

The problem of student loan debt is not confined to the physical therapy profession.

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Steinbrook⁶ reported that “23% of all medical school graduates had accumulated debt of \$200,000 or more,” in 2008 (p. 2629). In fact, Greysen et al⁷ further suggested that “medical school debt may simply represent the extreme of a system-wide complication of expansion in American higher education” (p. 843). A study of nursing student debt from 2013 found that the average nursing student owed approximately \$30,000, which was approximately equal to average loan debt of undergraduate students in the United States.⁸ Students who were pursuing their Bachelor of Science in Nursing had higher average debt than those who were pursuing an Associate’s Degree in Nursing. It appears that more education requires more debt from health professions students.

Research indicates that economic hardship from student loan debt may be related to stress. Financial debt has been found to be a significant determinant of both psychological and physical health among undergraduates.^{9,10} Furthermore, stress from loans is a likely link between loan debt and poor mental health.^{9,11} Student loans appear to be associated with inferior psychological functioning among undergraduates, even when adjusting for educational attainment.¹² In a study of 102 US allopathic medical schools, students with higher amounts of debt from medical school also reported higher stress levels and were more likely to delay major life events such as marriage.¹³

Lim et al¹⁴ studied financial help-seeking behaviors to explain the relationship between students’ levels of stress and debt. Financial self-efficacy appears to play a role in moderating finance-related stress in college students. We use the operational definition of financial self-efficacy by Tang and colleagues as “ones’ belief about their capability of organizing and executing course of action to achieve one’s ultimate financial goals” (p. 1–2).¹⁵ For the purposes of this article, financial self-efficacy will be referred to as self-efficacy.

It may be that levels of self-efficacy could also play a role in the debt-related stress of graduate health professions students. We used Duhachek’s coping construct to frame this study. In this framework, he describes how individuals respond to stress and negative emotions. “As individuals process stressful stimuli, the strategies they use for coping affect the nature of their subsequent emotional reactions and also their subsequent cognitive appraisals” (p. 49).¹⁶ As students encounter stress from student loan debt, they may experience both an emotional reaction to the stress and search out ways to cope with the stressful stimulus. This could be accomplished by a number of behaviors, including

avoidance, denial, rational thinking, emotional venting, and active coping, to name a few.¹⁶ Duhachek¹⁶ also hypothesized that one’s self-efficacy with handling a stressful stimulus will predict a person’s coping strategy. It follows that students with more financial self-efficacy might choose a more active, rational coping strategy, whereas those with low self-efficacy would be more likely to cope using avoidance or denial of their financial situation.

Educators are concerned about the possible impacts that student stress associated with loan debt may have on students’ postprofessional career selection.^{17,18} Specifically, students may be choosing their career paths in specialties or settings that reimburse at a higher rate rather than pursuing an area of practice or setting with which they are most passionate. Physical therapy salary data from 2016 reveals that the median salary for a physical therapist varied from \$72,000 in an academic institution to \$95,000 in skilled nursing facilities.³ Applying Duhachek’s coping construct, students who are worried about their financial situation could very well choose an area of practice based on their income potential. However, this association has yet to be studied in the health professions outside of medicine.

Physical therapy students are not alone in making career choices based on student loan debt. Rohlfling et al¹³ found that medical students who had higher amounts of student loan debt were more likely to choose a specialty that would lead to higher income and were also less likely to practice in a rural area. In a case study of one highly selective private college, Rothstein and Rouse¹⁹ suggested that undergraduate students in a variety of fields of study may be hesitant to borrow against future earnings, which could influence their postcollege career aspirations. Financial debt may negatively influence health professions students from pursuing advanced degrees, residencies, or fellowship training because these pathways often require further financial sacrifice.

To the authors’ knowledge, there has not been a study that explores the effects of student loan debt on stress and the effects of self-efficacy on postprofessional career selection on health professions students outside of medicine. This information would be relevant to administrators and faculty to determine if there is a need for education on financial management on campuses among health professions programs. The purpose of this study was to assess how students’ loan debt affects perceived financial and general stress while in health professions programs. A second purpose of the study was to assess if self-efficacy and stress from loan debt affected

students’ postprofessional career aspirations. The following research questions guided this study:

1. Do health professions students have a high degree of stress associated with their financial debt?
2. To what degree does the amount of student loan debt affect health professions students’ stress levels associated with financial debt?
3. What is the relationship between health professions students’ financial stress, self-efficacy, and postprofessional career selection?

METHODS

A cross-sectional survey was administered to a convenience sample of health care graduate students at a public, urban, academic medical center. All current students from each program were invited to participate in the survey via email during February and March of 2019, and they were ensured that their responses would remain anonymous. Program chairs solicited and encouraged student participation.

Subjects

Survey recruitment emails were sent to all first- and second-year graduate students from physician assistant studies (n = 111), physical therapy (n = 76), clinical nutrition (n = 39), clinical rehabilitation counselling (n = 22), prosthetics–orthotics (n = 13), and radiation therapy (n = 7) programs. There were no additional inclusion or exclusion criteria. Based on a 95% confidence level, we calculated that at least 134 responses (50% response rate) were needed from the 268 students to bring the margin of error to within ±6%.

The survey’s invitation cover letter described the study’s purpose, emphasized anonymity through aggregate-only reporting, and stated that voluntary consent was designated by responding to the survey link. The instructions reminded respondents not to consult with classmates to inflate their financial knowledge and to select the “unsure” option if they were truly uncertain regarding the correct answer. Two follow-up reminders were sent at 2 and 4 weeks post initial email invitation. The survey was closed when the final invitation did not generate more than a 10% increase in response.

Study data were collected and managed using Research Electronic Data Capture (REDCap) electronic data capture tools hosted at the UT Southwestern Medical Center in Dallas, TX. REDCap, CTSA NIH Grant UL1TR01105 is a secure, Web-based application designed to support data capture for

research studies. Prior to dissemination, the survey was reviewed and determined to meet exempt criteria by the Institutional Review Board at the UT Southwestern Medical Center in Dallas, TX.

Tool Development

A focus group consisting of 4 academic faculty members from 2 health professions were used to inform survey development. The focus group performed a literature review on existing assessments of financial literacy and determined that the literature was lacking a reliable financial literacy assessment for health professions students. Therefore, the focus group decided to create a new survey to serve this aim by adapting items from existing survey instruments on financial literacy.

Resources for survey questions on financial literacy included national surveys from the National Financial Educators Council,²⁰ the Financial Industry Regulatory Authority,²¹ the 2018 Harris Poll on Financial Literacy commissioned by the National Foundation for Credit Counseling,²² and Ohio State University's Study on Collegiate Financial Wellness Study.²³ Focus group members pulled questions from each of these surveys, being mindful of the need to have a survey that was encompassing of a multitude of content areas to fully assess financial literacy, while also limiting redundancy in question content. The present study served as the pilot testing for the survey.

The focus group selected 43 items related to financial literacy. Questions were then categorized based on content area into 4 subsections—financial lifestyle (consisting of 8 questions), savings (9 questions), credit and borrowing (10 questions), and investment (16 questions). Calculation of financial literacy scores was conducted by adding the number of questions each participant answered correctly.

We also chose to measure financial self-efficacy by incorporating all 6 items on the Financial Self-Efficacy Scale (FSES)²⁴ in our survey in its own subsection. The FSES is a 6-item questionnaire answered on an ordinal-based Likert scale. It measures how individuals manage financial difficulties and cope with financial setbacks.²⁴ Financial Self-Efficacy Scale scores have been shown to correlate with an individual's level of confidence in being able to manage money for a lifetime and help financial literacy programs better understand, guide, and motivate their clients. Total scores can range from 6 to 24 with higher scores indicating great confidence in coping with financial challenges. In a validation study of employees at a large, state university, the mean self-efficacy score of the

FSES was 17, ranging from 13.5 among those who were “not at all confident” and 20.2 for those who were “very confident.”²⁴ A study of 726 university employees found a Cronbach's alpha of .76, which the authors interpreted as “a high alpha reliability” of the 6 items on the FSES (p. 60).²⁴

Two additional variables of interest included the amount of student loan debt a student has accumulated up to the point in time of the survey (current loan) and the total amount of student loan debt a student expects to have accumulated for their current degree (total loan). Both loan variables were rated on a 9-point ordinal scale, with 1 representing \$1–9,999 of debt and 9 representing \$250,000+ of debt.

Loan stress was measured by students' response to the question “How much stress does the student loan debt you are accruing cause you?”, and responses were on a 5-point Likert scale from “none” to “extreme amount.” Students were also asked to respond to the question “How much does the amount of student loan debt you expect to graduate with influence your decisions about your post-training career selection?” This variable was termed “career selection.” Students then responded to the question “How much does the amount of student loan debt you expect to graduate with influence your decision to pursue an additional graduate degree (eg, MBA, MA, MS, PhD)?” on a 4-point Likert scale ranging from “none” to “a lot.” This variable was termed “graduate degree.” We also asked students whether the cost of tuition was a deciding factor for choosing their selected training program. Additional categories for data capture included future career and training plans, financial resources, and self-reported stress associated with debt. See the Appendix (see Supplemental Digital Content, <http://links.lww.com/JOPE/A102>) for the full survey.

Data Analysis

All data were analyzed using STATA 14.2 statistical software.²⁵ Descriptive statistics were analyzed to answer our first research question about the degree of stress associated with financial debt. We conducted a multiple regression analysis to answer the research questions about students' stress levels associated with the amount of financial debt and postprofessional degree career aspirations. Self-reported stress due to loan debt was used as the dependent variable, and current debt, total debt, self-efficacy, career selection, and graduate degree were used as independent variables.

RESULTS

Of the 268 first- and second-year graduate students, 139 (51.9%) responded to the survey.

This included 60 of 111 (54.1%) of physician assistant students, 53 of 76 (69.7%) physical therapy students, 11 of 39 (28.2%) clinical nutrition students, 3 of 22 (13.6%) of rehabilitation counseling students, 10 of 13 (76.9%) of prosthetic–orthotic students, and 2 of 7 (28.6%) radiation therapy students. The mean age of the respondents was 24 ± 4.5 years with 57.6% being in the first year of their graduate program. 75.5% of the students were female, 66.2% identified themselves as being white non-Hispanic, and 71.9% were single. Most respondents had a reasonably affluent background with a median combined parental income of more than \$100,000/year and more than 70% of their parents having attended college (Table 1). There was no statistically significant difference between students of different health professions and their financial literacy, self-efficacy, self-reported parental income level, or race/ethnicity. Age was statistically different among programs, with prosthetics and orthotics having the youngest students on average (mean of 23.8 years) and clinical nutrition having the oldest (mean of 29.3 years).

Stress from Loan Debt

Our first research question aimed to determine whether students felt stress due to their financial debt. Figure 1 displays a histogram of students' responses to the question, “How much stress does the total amount of debt you are accruing cause you?” Students responded to this question using a 5-point Likert scale from “none” to “extreme amount.” 81% reported having a medium, large, or extreme amount of stress from the total amount of debt they are accruing. The median response indicated that the average student has a “medium amount” of stress.

Assumptions Met

From the sample of 139 who completed the survey, 90 answered the questions about the amount of current student loan debt they have (termed “current debt”), and the total amount of student loan debt they expect to accrue during their professional degree (termed “total debt”). The same 90 participants responded when asked about their stress levels associated with their financial debt (termed “stress”). All 139 participants answered the questions regarding their postprofessional degree plans. Histograms showing student responses to their postprofessional career selection and graduate degree plans are illustrated in Figure 2. Listwise deletion was used to account for any missing data.

We then ensured that the necessary assumptions were upheld prior to running a

Table 1. Demographic Characteristics (n = 139)

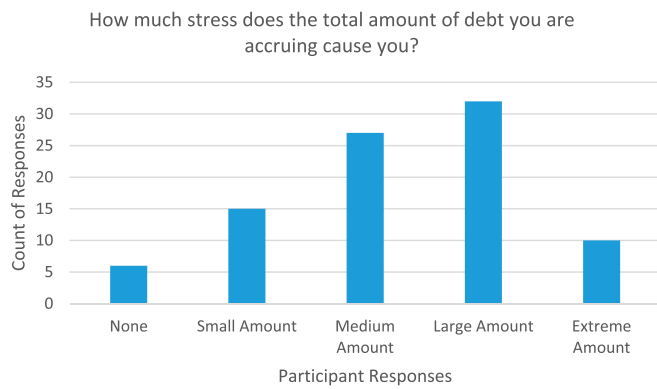
Variable	n (% of Responses)	
Year in program		
First-year student	80 (57.6)	
Second-year student	59 (42.4)	
Sex		
Female	105 (75.6)	
Male	33 (23.7)	
Race/ethnicity		
White/non-Hispanic	66.2	
Hispanic	6.5	
Black or African American	2.9	
Native American	0.7	
Asian	10.8	
Other	2.9	
Prefer not to answer	1.4	
Two or more races	8.6	
Highest earned degree	Father	Mother
Some high school or high school graduate	19 (13.7)	20 (14.4)
Specialized technical training/associate's degree	12 (8.63)	15 (10.8)
Some college or college degree	51 (36.7)	65 (46.8)
Some graduate school or graduate degree	53 (38.1)	37 (26.6)
Unsure/not applicable	4 (2.9)	2 (1.4)
Parent(s)/guardian(s) combined annual income		
Less than \$25,000	3 (2.2)	
\$25,000–\$49,999	11 (8.0)	
\$50,000–\$74,999	16 (11.6)	
\$75,000–\$99,999	15 (10.9)	
\$100,000–\$149,999	26 (18.8)	
\$150,000–\$199,999	21 (15.2)	
More than \$200,000	26 (18.8)	
Do not know	14 (10.1)	
Prefer not to answer	6 (4.3)	
Was the cost of tuition a deciding factor in selecting which graduate training program you would attend?		
Yes	113 (81.3)	
No	26 (18.7)	
Do you now or have you ever had a student loan?		
Yes	90 (64.7)	
No	47 (33.8)	
Unsure	2 (1.4)	

multiple regression analysis. First, we assessed for outliers in the data using box plots. The presence of linear relationships between the

dependent and independent variables was verified through scatter plots. Homoscedasticity was then evaluated using scatterplots of

standardized residuals and standardized predicted values for the regression model. Homoscedasticity occurs when “the variability in

Figure 1. Students' Self-Reported Levels of Stress due to Financial Debt

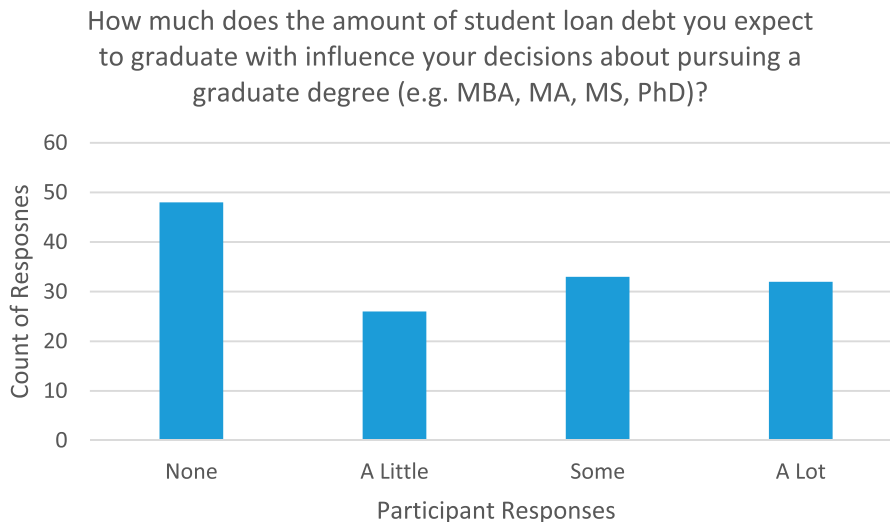
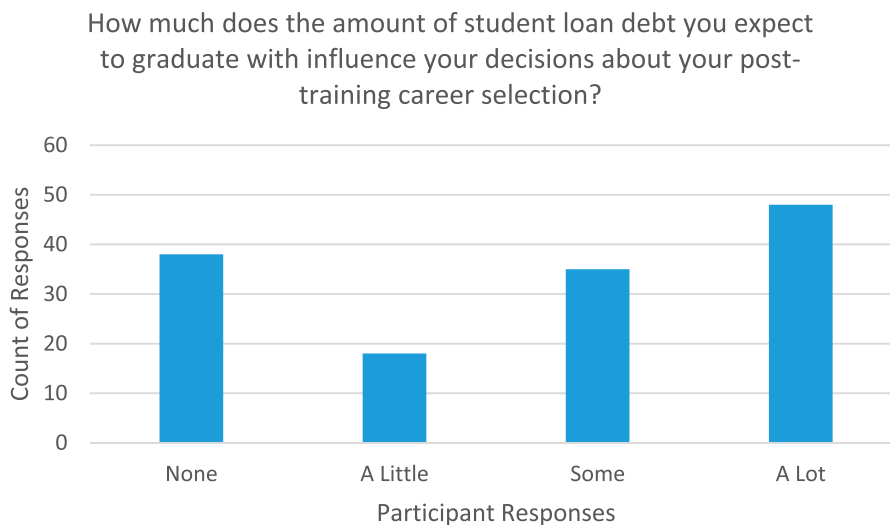


scores for one continuous variable is roughly the same at all values of another continuous variable” (p. 80).²⁶ Standardized errors were relatively evenly distributed across the range

of predicted values, so this assumption was also upheld.

We checked for multicollinearity by testing for variance inflation factors. Variance inflation

Figure 2. Student's Responses to (Top) the Question Regarding Career Selection due to Student Loan Debt and (Bottom) the Question Regarding the Decision to Pursue Another Postprofessional Degree



factors in this case were all less than 2, so we determined that there was little multicollinearity between the variables tested. The assumption that the residuals from the regression analysis was normally distributed was tested using the *kdensity*, *pnorm*, and *qnorm* commands in STATA. This assumption was also upheld. After we determined that the above-mentioned assumptions were upheld, we ran a single multiple regression analysis to answer both (1) our second research question regarding the degree to which the amount of student loan debt affects health professions students' stress levels associated with financial debt and (2) our third research question regarding the relationship between health professions students' financial stress, self-efficacy, and postprofessional degree aspirations.

Student Loan Debt and Stress

Students' self-reported stress levels (the dependent variable) from their debt was simultaneously regressed on the following independent variables: students' current student loan debt, total student loan debt they expect to accumulate, self-efficacy scores, and their perception about how much their stress from student loans influences their career selection and decisions to pursue a graduate degree. The result was statistically significant, $F(5, 74) = 21.33 (P < .001)$, with a large effect of $R^2 = .59$. Adjusted R^2 effect sizes account for the inflation of effect sizes due to sampling error.²⁷ The adjusted R^2 for this regression was .56, indicating some shrinkage due to a theoretical correction for sampling error.

Table 2 includes the beta weights and structure coefficients for the regression model. The current loan debt could explain 11% of the variance explained in students' self-reported stress, and the total amount of debt students expected to accumulate during their current professional training could explain 18% of the variance explained in stress by itself.

Financial Stress, Self-Efficacy, and Postgraduate Plans

The overall mean financial self-efficacy scale score was 15.5 ± 3.7 . The 6 unique efficacy attribute questions ranged from a low of 2.2 (1–4 scale) for budgetary spending adherence during an unexpected expense crisis to a high of 2.9 for the ability to figure out a solution when faced with a financial challenge. The possible range for the overall FSES was 6–24.²⁴ The overall financial literacy score on the 43 questions was 38.8%.

Figure 2 displays students' responses to questions regarding debt and postprofessional career selection and graduate degree training. Of the students surveyed, more than 70% reported that the amount of student loan

Table 2. Beta Weights and Structure Coefficients for the Regression Model With Loan Stress as the Dependent Variable (n = 90)

Predictor	Research Question	Beta	P-Value	r_s	r_s^2
Current debt	2	-.01	.844	.32	.11
Total debt	2	.01	.855	.43	.18
Self-efficacy	3	-.07	.005 ^a	-.60	.36
Career selection	3	.57	<.001 ^a	.92	.85
Graduate degree	3	.19	.054	.73	.53

^aStatistical significance at $P < .05$.

debt they expect to graduate will influence their posttraining career selection.

Within our regression analysis, only 2 of the predictors, self-efficacy and career selection, had beta weights that were statistically significant. Self-efficacy yielded a $P = .005$, explaining 36% of the variance explained in students' self-reported stress from debt by itself (Table 2).

The regression model in Table 2 also found that students' response to the question, "How much does the amount of student loan debt you expect to graduate with influence your decisions about your post-training career selection?" yielded a statistically significant beta weight ($P < .001$). Career plans could explain 85% of the variance explained in student stress associated with debt by itself. Students' response to the question, "How much does the amount of student loan debt you expect to graduate with influence your decisions about your decision to pursue a graduate degree (eg, MBA, MA, MS, PhD)?" could explain 53% of the variance explained in students' perception of debt-related stress by itself.

DISCUSSION

Our results revealed that health professions students have stress associated with their financial debt. Our survey found that students in one academic medical center had, on average, a "medium amount" of self-reported stress levels associated with financial debt. Of note, although, is that 11% of the students surveyed reported an "extreme amount" of stress. These results were taken from students within a state-supported institution, and it is likely that students in more expensive programs would experience additional debt and additional debt-related stress.

Student Loan Debt and Stress

Our regression model provides some evidence that the amount of stress students experience could be related to the amount of student loan debt they have and expect to accumulate during their professional training. The total expected amount of student loans could

account for 18% of the variance explained in students self-reported loan stress. This suggests that although the beta weight for this variable was not statistically significant, the variable may still be a meaningful predictor of stress.

Financial Stress, Self-Efficacy, and Postprofessional Career Selection

Self-efficacy and stress had a strong, negative relationship. This provides some evidence that stress may decline as students' self-efficacy increases. It may be that stress levels associated with loan debt can be mitigated by improved financial awareness. Similarly, the regression model demonstrated a statistically significant relationship between financial stress and postprofessional career selection. Career selection could explain 85% of the variance explained in stress by itself. A limitation of this study is the timing of the survey in relation to career selection. Some students were early in their training and may have entered the program without thoroughly researching salary options.

Our model indicates that student loans, excluding other forms of debt, could be a strong predictor of students pursuing higher-paying jobs and areas of practice after they graduate. The student response we found in our survey further corroborates prior literature, which has determined that as students assume more student loan debt, the net present value (the net costs and benefits) of their degree declines, resulting in students needing to have additional means to pay for their loans. Physical therapy students who graduate with \$120,000 or more in debt could fall into economic hardship, as defined as paying 20% or more of their monthly income in loan repayment.⁵ This may influence students' choices in finding a setting that pays a higher income. Our study also supports the work of Ambler,²⁸ who found that 28% of entry-level physical therapists cited debt as a barrier to working in their desired practice setting.

Shields and Dudley-Javoroski²⁹ further found that as students assume \$200,000 or more in debt for a degree in physical therapy, they would no longer be able to meet recommended debt service ratio recommendations. Students in this situation would need alternate sources to be able to repay loans, such as a spouse who has a higher income or an unusually high income themselves. Our study compliments this prior study, indicating that those students with more debt may also look for a position with a higher salary, possibility in an effort to mitigate their stress-associated debt.

The results from our study indicate strong, positive relationships between loan stress, the amount of loan debt a student expects to have upon graduation, and students' postprofessional degree career choices. Although the results of the study are not generalizable to the entire population of health professions students, it does warrant further research into this area. The cost of attending a health professions program could be limiting the professional career aspirations of new graduates, thus potentially limiting incentives to pursue postprofessional training such as advanced degrees or residency and fellowship training secondary to the financial sacrifice they require.

Results from the survey are consistent with previous research that suggests that student's financial stress and postgraduate career aspirations are associated with the amount of student loan debt accumulated.^{10,12,13} Johnson et al³⁰ found that the amount of debt did not affect fellowship selection; however, 50% of all respondents indicated that student loan debt was a consideration in their final selection of location and type of practice. The factor of high levels of debt was even a more prevalent consideration for nonorthopedic medical trainees.³¹ This finding was also present in for medical and dental residents in other areas of training with higher levels of debt influencing career choices and pursuit of further fellowship training.³²⁻³⁴ Similar findings were found when specifically investigating the correlation between debt level

and the stress it creates.^{13,35} Additionally, 2 studies found pharmacy and dermatology students in training were not fully knowledgeable regarding loan repayment options and that this factor affected their apprehension toward accumulating educational debt and the impact it will have on future life choices.^{32,36} Stress from student loans seems to affect postgraduate career choice, as well as decisions to pursue postprofessional education. This could have a significant negative impact on the health professions, but further research is needed to determine the extent of impact. Thus, our study and prior research evidence support the application of Duhachek's coping construct to predict how health professions graduate students will respond to debt-related stress in light of their financial self-efficacy.

Future Research Implications

This study explored students' aspirations during their professional degree programs. Further research is warranted to study whether these aspirations change during the early career phase of a physical therapist. It may be that many physical therapists take on more lucrative positions early in their career and then change specialties or areas of practice within the first 5 years of practice, once student loan debt becomes more manageable.

Further research is indicated to determine if education of health professions students could positively impact financial stress levels and mental health. Gutter and Copur³⁷ found that those students who displayed risky credit card behaviors, compulsive buying, lack of budgeting, and lack of saving were significantly more likely to have poorer financial well-being, even when controlling for financial disposition. Lim et al¹⁴ suggested that offering courses on financial management on campus may be helpful in improving students' financial well-being. This is because financial well-being has been shown to be highly correlated with financial self-efficacy and financial knowledge itself. Communication of on-campus financial resources within the first year of programs and encouragement to attend financial management courses in the last year of programs may be the most effective way to utilize on-campus resources for students getting close to entering the workforce full time.^{10,14}

Limitations

There are a number of limitations that need to be considered in regards to the interpretation of our findings. We only studied 2 cohorts of students from a single institution. That institution is a public university in an urban setting, and therefore, the results may not be generalizable to other populations of health professions students. Furthermore, our sample was heterogenous in the number of health

disciplines studied (7 in total), and it consisted primarily of female students with relatively high familial affluence. We further acknowledge that, in terms of parental income, students may not be privy to the income status of their families. We also were not able to capture precise measurements of student debt levels or stress apart from student report.

CONCLUSION

In our sample of a cohort of health professions students from a public academic medical center in the United States, 81% reported having a medium, large, or extreme amount of stress from the total amount of debt they are accruing. Of the students surveyed, more than 70% reported that the student loan debt they expect to have upon graduation will influence their posttraining career selection. Our regression analysis indicated that there is an association between stress, financial self-efficacy, and postprofessional career selection. Because physical therapy students were not statistically significantly different than the other health professions students in their financial literacy, stress, or self-efficacy scores, these findings are highly relevant for both physical therapy educators and health professions educators more broadly. Further research is indicated to determine if financial self-efficacy can moderate the association between student debt, stress, and future career plans.

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ERRATUM

Assessment of Employability Skills: A Systematic Review of the Availability and Usage of Professional Behavior Assessment Instruments: Erratum

In the article mentioned above the following errors were made:

Under author affiliations, the 3rd author, Michel Tilstra's information incorrectly listed his affiliation as a Physical Therapy program. The correct program should have been listed as an "Occupational Therapy program".

In the first sentence of the abstract, under "Background and Purpose, the word 'valued' was erroneously omitted. The sentence should read "Professionalism is **highly valued** by health care practitioners, resulting in an increased focus by education programs on explicit instruction and development of student professional behaviors (PB), skills and abilities."

The word "Therapy" was missing the "Th" in the heading on page on page 259.

These errors have now been corrected in the original version.

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1. McCallum CA, Murray L, Tilstra M, Lairson A. Assessment of employability skills: A systematic review of the availability and usage of professional behavior assessment instruments. *J Phys Ther Edu*. 2020; 34:252-263.