

## ▲ Financing Physical Therapy Doctoral Education

### Methods Used by Entry-Level Students and the Financial Impact after Graduation

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With the move to the doctor of physical therapy (DPT) degree and increasing tuition costs, there is concern about financing entry-level education. The purposes of this study were to identify how students finance their DPT education and to describe the financial impact after graduation. **Methods:** A written survey was used to collect data on financing DPT education, student debt, and the financial impact on graduates. There were 92 subjects who had graduated from one program. Frequencies as well as nonparametric statistics using cross-tabulations and chi-squared statistics were calculated. **Results:** The response rate was 55%. Of the respondents, 86% had student loans, 66% worked during school, 57% received some family assistance, and 21% had some scholarship support. The amount of monthly loan repayment was not statistically related to the ability to save for a house, the ability to obtain a loan for a house or car, or the decision to have children. Saving for the future ( $p = 0.016$ ) and lifestyle choices ( $p = 0.035$ ) were related to the amount of monthly loan repayment. **Discussion:** Major sources of funding were student loans, employment income, and/or family assistance. Respondent's ability to save for the future and lifestyle choices were negatively impacted when loan debt increased. Physical therapist education programs should consider offering debt planning and counseling. *J Allied Health* 2011; 40(4):169–173

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ENTRY-LEVEL physical therapist education has moved to the doctor of physical therapy (DPT) degree. In 2009, 86% of physical therapist education programs offered the DPT.<sup>1</sup> Tuition for the DPT has risen over the past several years, as has tuition for other fields and for post-secondary education

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overall.<sup>1–3</sup> Concerns have been raised over the rising costs of a DPT education, the ability of students to finance their DPT education, and the impact of student debt on DPT graduates.<sup>4,5</sup> Among health care professions, most of the research on financing education has been on medical school financing. Examinations of methods of financing medical school education and the factors that impact medical school applications, student debt, and career paths have been published in the literature and in reports by the Association of American Medical Colleges (AAMC).<sup>6–12</sup> There are very limited studies that examine the financing of physical therapy doctoral education.

The American Physical Therapy Association (APTA) supports doctoral physical therapy education, and the APTA Vision Sentence for Physical Therapy 2020<sup>13</sup> states:

By 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy, recognized by consumers and other health care professionals as the practitioners of choice to whom consumers have direct access for the diagnosis of, interventions for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.

By December 31, 2015, the Commission on Accreditation in Physical Therapy Education (CAPTE), the body which accredits entry-level physical therapist education programs, will require the DPT as the degree to complete an entry-level physical therapist education program.<sup>14</sup>

Financing for physical therapy education is one concern that has been identified with the move to the DPT.<sup>4,5</sup> On average, physical therapist education at the doctoral level requires more credits, is longer for both didactic education and clinical education, and is more expensive than physical therapist education at the master's level.<sup>1</sup> Information on physical therapist education programs is collected yearly by CAPTE from various sources and is available to APTA members as a fact sheet on the CAPTE website. A comparison of the mean total cost of professional physical therapist education programs for master's and doctoral programs as reported in the 2009-2010 Fact Sheet Physical Therapist Education Programs is presented in Table 1. Total education program cost includes tuition, fees, and other required program expenses such as texts, lab fees, and insurance.<sup>1</sup>

TABLE 1. Mean Total Cost of Professional Program as Reported in the CAPTE 2009-2010 Fact Sheet: Physical Therapist Education<sup>1</sup>

	Master's Program	Doctoral Program
Public in-state	\$26,825	\$43,133
Public out of state	\$55,200	\$81,067
Private	\$82,565	\$86,563

Tuition for graduate education has been rising, and this has increased costs for physical therapy education whether at the master's or doctoral level.<sup>2</sup> Increasing costs may impact physical therapist education including the applicant pool, affordability, student stress, and curricular design. There are also concerns about the impact of student debt after graduation on financial decision-making, including loan repayment, saving, lifestyle, and job and career choice.<sup>5,15</sup>

The literature on financing graduate education in the healthcare field has primarily come from medicine. The largest, most significant cost for medical education is tuition and fees.<sup>7</sup> Data from the AAMC revealed that median private medical school tuition and fees increased by 50% between 1984 and 2004, while median public medical school tuition and fees had increased by 133%.<sup>7</sup> In addition to the increased cost of tuition, other factors contributing to increased debt for medical school graduates were increased interest accrued on loans, increased debt from undergraduate education, and more "nontraditional" students with children to support. The AAMC reports that the average educational debt of indebted medical school graduates of the class of 2009 was \$156,456.<sup>7</sup> The financial cost of medical education and the resulting student debt have been studied to determine the impact on the applicant pool, career choice, diversity of the physician workforce, and young physicians.<sup>7-12</sup>

In a study of Michigan medical school graduates, Zonia et al.<sup>17</sup> found that the primary funding source for medical education was loans, followed by family support and scholarships. Approximately 38% of medical students in this study had a debt load of over \$150,000.<sup>17</sup> Predictors of debt load were examined, and differences in borrowing habits, gender, age, race or ethnicity, and marital or parental status were not found to be significant. The level of student borrowing in the Zonia et al. study depended on the amount of family support, availability of scholarships, the type of medical school (public vs private), and choice of specialty. There are concerns that increasing medical student debt may impact career choices, as some studies have shown that student debt may influence graduates to choose higher paying specialties instead of primary care medicine.<sup>7,12,17</sup> The applicant pool may also be affected, as students who are lower income or have other financial responsibilities may not be able to attend medical school.<sup>7</sup>

Although there is research on medical education financing, there is very limited research on physical therapy education financing. Redman-Bentley (2004)<sup>18</sup> surveyed phys-

ical therapy directors on setting a realistic tuition for DPT education programs based on expected income. Questionnaires were sent to clinical facilities affiliated with one physical therapist education program to request information on therapists' salaries and benefits, location and type of facility, and services provided; in addition, participants were asked to identify a reasonable tuition rate for a 3-year, professional DPT program. There were 126 responses for a response rate of 35.2%. Respondents indicated that the average starting salary for physical therapy graduates was \$48,242 (MPT) and \$48,713 (DPT). An annual tuition of \$18,001 to \$21,999 was considered to be realistic by close to half (43.7%) of the respondents.<sup>18</sup> In another study, Little<sup>19</sup> examined the cost of physical therapist education when tuition, housing, and program length were considered. Differences in housing costs and total length of the program significantly impacted the total cost of physical therapist education. Lower regional housing costs and shorter program length resulted in lower costs for physical therapist education.<sup>19</sup>

There is a lack of research on financing a doctoral physical therapy education and the impact that financing education has on the physical therapy graduate. The purposes of this study were to identify how students finance their DPT education and to describe the financial impact on graduates.

## Methods and Subjects

### SUBJECTS

A sample of convenience included 92 graduates from three consecutive classes of one entry-level DPT education program. The DPT education program is located in a state university. Students currently enrolled in the DPT education program and graduates who were not in one of the three cohort classes were excluded from the study. Participant demographics are listed in Table 1.

### INSTRUMENTATION

This was a retrospective study in the form of a written, self-administered survey with 23 forced-choice and 2 open-ended questions. The survey, designed by the researchers, included questions on demographics, methods used to finance physical therapy education, current employment status, and the impact of physical therapy education financing on current financial decisions. Face and content validity were addressed by having two faculty members with survey expertise review and critique drafts of the survey. Based on their feedback, changes were made to the survey to enhance the clarity of the questions. A pilot study of the survey, conducted to assess test-retest reliability, revealed correlation coefficients between 0.875 and 1.0 for the various questions. The survey was deemed to be valid and reliable. Data on the tuition and fees for the three DPT cohort classes was collected from the university's registrar.

TABLE 2. Participant Demographics

Gender		
Female		96%
Male		4%
Age		
21–30 yrs		84%
31–50 yrs		16%
Ethnicity		
Asian/Pacific Islander		4%
White		96%
Residency during PT school		
In-state		100%
Out of state		0%

Following Institutional Review Board approval, a cover letter, informed consent forms, and the survey were mailed to the subjects. Reminder post cards were mailed to those subjects who had not returned the survey by the due date. A monetary incentive was offered and five respondents were randomly selected to receive a \$25 cash card.

#### DATA ANALYSIS

The survey response rate was 55%. Data were entered into the Statistical Package for Social Sciences (SPSS) version 11.5 (SPSS Inc., Chicago, IL). Descriptive statistics were used to determine frequencies for each of the survey items. Cross-tabulations were calculated between categorical variables, and chi-squared statistics were used to determine relationships among selected variables. To determine if a respondent borrowed in excess of tuition and fees, the amount that the respondent had borrowed was compared to data on tuition and fees, during the period that the respondent attended the university.

### Results

The major sources of funding for respondent's DPT education were loans, employment earnings, family assistance, and scholarships. There were significant relationships between monthly loan repayment amounts and some financial decisions. Participant demographics are shown in Table 2. The total cost of tuition and fees for a DPT education by cohort class is shown in Table 3.

As shown in Table 4, 86% of respondents had loans, 66% had employment income, 57% received family assistance, and 21% had scholarships. Of respondents with loans, 2% had loans of <\$20,000, whereas 80% had loans of \$40,000 or greater. Only 3% of those who had employment income contributed over \$30,000 to their DPT education costs, and 50% contributed <\$5,000. Of those respondents who received family assistance, 36% had contributions of <\$5,000, and 22% had contributions >\$20,000. For those who had received a scholarship, 22% were awarded <\$5,000, and no one had received a grant to finance their education.

TABLE 3. Total Tuition Cost for DPT Education by Cohort Class

Cohort Class	Total Tuition Cost
2005	\$45,030.75
2006	\$48,392.75
2007	\$52,690.25

TABLE 4. Types of Financing for DPT Education

Type of Financing	% of Participants
Loans	86.3%
Employment contributions	68.6%
Family assistance	56.9%
Scholarships	21.6%
Assistantships/work study	7.8%

Of the respondents, 96% were currently employed as physical therapists, with 59% having a salary in the range of \$50,000 to \$60,000. Following graduation, student debt had influenced job choice of 44% of respondents, and of that, 55% indicated that they had accepted a hiring incentive.

Of the 86% of respondents with loans, 42% reported borrowing loans in excess of their tuition and fees. The total loan amount, by percentage of participants, is shown in Table 5, and the amount of monthly loan repayment is shown in Table 6. Of the participants, 68% reported loan repayment periods greater than 10 years. There was not a statistically significant relationship between the amount of monthly loan repayment and the ability to save for a house, the ability to obtain a loan for a house or car, or the decision to have children. There was a statistically significant relationship between the amount of monthly loan repayment and other financial choices. As monthly loan repayment amounts increased, more respondents indicated that the ability to save for the future [ $\chi^2(3) = 10.0$ ,  $p = 0.016$ , power = 0.760] and lifestyle choices such as travel, social, and discretionary spending [ $\chi^2(3) = 9.2$ ,  $p = 0.035$ , power = 0.162] were negatively impacted.

### Discussion

The purposes of this study were to identify how students finance their DPT education and to describe the financial impact on graduates. In this study, DPT students financed their education with loans, employment earnings, family assistance, and scholarships. The majority of respondents financed their education using student loans, and 50% of the participants had loans over \$60,000. The use of loans by a majority of the respondents to finance their education is consistent with the literature on financing medical and professional education.<sup>7-11,17,20</sup> The most recent data from the AAMC found that 87% of medical students had outstanding loans upon graduation, and over 58% had loans of over \$150,000.<sup>7</sup> Over half of the participants in this study did not have loan debt upon entry to the DPT program.

TABLE 5. Total Loan Amount Borrowed by Percentage of Participants

Loan Amount in Dollars	% of Participants
<20,000	2.3%
\$20,000–\$39,999	18.2%
\$40,000–\$59,999	29.5%
\$60,000–\$79,999	36.4%
\$80,000–\$100,000	13.6%

TABLE 6. Amount of Monthly Loan Repayment by Percentage of Respondents

Amount of Monthly Loan Repayment	% of Respondents
<\$250	29.8%
\$250–\$500	36.2%
>\$500	34.0%

Recent data indicate that increasing numbers of students enter medical school with undergraduate debt.<sup>7</sup>

In this study, students who did not have loans had considerable family support and employment earnings. This is consistent with the study conducted by Zonia et al.,<sup>17</sup> which stated that students did not borrow as much when they had family support.<sup>11,17</sup> Twenty-two participants borrowed in excess of their costs for tuition and fees. These participants did not report substantial family financial support or employment contributions. Zonia et al.<sup>17</sup> noted that medical students going into specialty careers tended to borrow in excess because they knew that they would have a higher salary that could be used to pay their debt. This would probably not be the case for the physical therapy students, as physical therapy does not have specialties that pay significantly higher salaries. The excess may have been used to pay for other expenses that can be used for student loans, such as room and board, supplies, equipment, or transportation, but that cannot be determined from this study.<sup>21</sup>

Employment earnings were the second most common source of funding. This differs from the Zonia et al. study,<sup>17</sup> where family contributions and scholarships were the second and third sources for medical education costs. Of the participants reporting employment contributions, 50% contributed <\$5,000, and only 3% of participants contributed \$30,000 or more toward their education. Many DPT students may not have chosen to use employment earnings or were not able to contribute significantly to their educational costs given that they may have used employment earnings for housing, food, and other costs. They may not have had significant employment earnings, as they were able to work only a limited number of hours given the rigorous curriculum.

Family contributions assisted 55% of respondents with funding for their education; however, of this percentage, most received less than \$10,000. Furthermore, it is not surprising that many students did not have scholarships, assistantships/work study, or grants, considering the limited

number of such funding sources available to physical therapy students.

There was an impact on financial management and decisions following graduation. Increasing monthly loan repayment amounts were found to affect respondents' ability to save for the future and lifestyle choices (travel, social and discretionary spending). Decisions to buy a house, have children, or obtain a car/home loan were not statistically related to increased loan repayment amounts. Buying a house, getting a car/home loan, and/or having children may be higher priorities for the participants, and participants may be giving up other things such as travel and discretionary spending. The inability to save for the future could potentially impact participants longer-term goals, such as paying for their children's college education or saving for their own retirement.

According to Baum and Schwartz,<sup>23</sup> there are several models or approaches to determining the ability of graduates to manage student debt in addition to the graduate's perception of "manageable." A frequently suggested guideline for determining manageable student debt is the 8% rule. The 8% rule suggests that graduates who devote >8% of their gross income to student loans may have unmanageable debt. Some experts have suggested that the guideline for manageable debt could be 10% to 15% but no greater than 20% of gross income.<sup>22,23</sup> The ability of respondents in this study to manage student loan debt was calculated using guidelines of 8%, 15%, and 20% of gross income. According to the 8% rule, 48% of respondents had loan debt that could be considered unmanageable. The 15% model showed that 3% of respondents had debt that could be unmanageable. No respondents had debt that might be considered unmanageable when applying the 20% guideline.

Tuition rates continue to rise, and although the employment outlook for physical therapists is good, salaries are not increasing at the rate of tuition. DPT students will continue to rely on student loans, and student debt will likely increase for new graduates. While most participants in this study appeared to be managing their student debt according to the 15% guideline, future graduates may not be able to manage their debt as both undergraduate and graduate tuition has continued to rise. Student debt continues to be a concern for other health care professions, especially medicine. Medical educators are looking at various approaches to lowering student debt and to assisting medical students with managing their debt. Efforts by the Medical Student Society (MSS) have focused on controlling tuition, adjusting student loans, and increasing loan repayment programs.<sup>7</sup> One study focused on factors such as cost of tuition, length of medical school, length of medical residencies, and increasing compensation for medical residents. Decreasing the duration of medical education was proposed to offer the most potential to reduce the financial burden to students.<sup>16</sup>

This study is significant to physical therapy students and education programs, as it provides information on the methods used by students to finance their education and the impact on financial decisions following graduation.

Given that loans are the primary source of physical therapy education financing, and that physical therapy graduates may incur significant debt, the results of this study may encourage physical therapist education programs to help students better manage or plan for debt and to provide resources on debt management and counseling. Efforts by professional associations, educators, and students to advocate for controlling tuition, adjusting student loans, and increasing loan repayment programs are also critical.

Limitations of the study include small sample size and participants from only one school, which limit the ability to generalize the results to a larger population. The ability to recall information may have been a factor in the study. In addition, some variables related to financing education and student debt were not investigated. Repeating this study with a larger number of graduates from diverse programs would allow the results to be generalized to the larger population of physical therapy graduates. Given the increasing costs of post-secondary tuition, the ability of graduates to manage their student debt could be changing, and additional research is needed to examine this issue.

This study found that student loans are the major source of funding for students pursuing a DPT degree. The amount of monthly loan repayment could be considered manageable using the 15% of gross income guideline. There was a significant relationship between the monthly loan repayment amount and the ability to save for the future and lifestyle choices (such as travel and discretionary spending). Physical therapist education programs should consider providing resources on debt management and counseling to students. Educators and the profession need to continue to advocate for increased scholarship funding, debt forgiveness programs, and adjustments to loan repayment programs.

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## REFERENCES

1. Commission on Accreditation in Physical Therapy Education. 2009-2010 Fact Sheet: Physical Therapist Education Programs. Alexandria, VA: CAPTE, American Physical Therapy Assoc.; May 2010.
2. CollegeBoard. Economic challenges lead to lower non-tuition revenues and higher prices at colleges and universities: public four-year tuition continues to rise at faster rate than private four-year tuition [press release]. New York: CollegeBoard; Oct 20, 2009. Available at <http://www.collegeboard.com/press/releases/208962.html>. Accessed Sep 23, 2010.
3. Zumeta W. Financing higher education access in challenging times. In: The NEA 2007 Almanac of Higher Education. Washington, DC: National Education Association; 2007. Available at [http://www.nea.org/assets/img/PubAlmanac/ALM\\_07\\_06.pdf](http://www.nea.org/assets/img/PubAlmanac/ALM_07_06.pdf). Accessed Sep 23, 2010.
4. Delitto A. We are what we do: 39th Mary McMillan Lecture. *Phys Ther* 2008; 88(10):1219–1227.
5. Feldman A. Is the DPT bad for parenthood? *Adv Phys Ther Rehabil Med* 2006;17(22):63.
6. Kassebaum D, Szenas P, Schuchert M. On rising medical school debt: in for a penny, in for a pound. *Acad Med* 1996;71(10):1123–1134.
7. Medical student debt [webpage]. Chicago: American Medical Association; n.d. Available at: <http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/medical-student-section/advocacy-policy/medical-student-debt.shtml>. Accessed Sep 30, 2010.
8. Widge A, Christensen A (eds). 2003 Report of the American Medical Association-Medical Student Section Task Force on Medical Student Debt (Final Draft). Chicago: American Medical Association. Available at: [http://www.ama-assn.org/ama1/pub/upload/mm/15/debt\\_report.pdf](http://www.ama-assn.org/ama1/pub/upload/mm/15/debt_report.pdf). Accessed Oct 1, 2010.
9. Jolly P. Medical School Tuition and Young Physician Indebtedness. *Health Affairs* 2005; 24(2):527–535. Available at: <http://content.healthaffairs.org/content/24/2/527.full>. Accessed Oct 5, 2011.
10. Association of American Medical Colleges. Medical Educational Costs and Student Debt: A Working Group Report to the AAMC Governance. Washington, DC: AAMC; Mar 2005. Available at: [https://services.aamc.org/publications/showfile.cfm?file=version35.pdf&prd\\_id=121&prv\\_id=137&pdf\\_id=35](https://services.aamc.org/publications/showfile.cfm?file=version35.pdf&prd_id=121&prv_id=137&pdf_id=35). Accessed Oct 1, 2010.
11. Association of American Medical Colleges. Medical School Tuition and Young Physician Indebtedness: An Update to the 2004 Report. Washington, DC: AAMC; Oct 2007. Available at: [https://services.aamc.org/publications/showfile.cfm?file=version103.pdf&prd\\_id=212&prv\\_id=256&pdf\\_id=103](https://services.aamc.org/publications/showfile.cfm?file=version103.pdf&prd_id=212&prv_id=256&pdf_id=103). Accessed Oct 1, 2010.
12. Tonkin, P. Effect of rising medical student debt on residency specialty selection at the University of Minnesota. *Minn Med* June 2006. Available at: <http://www.minnesotamedicine.com/PastIssues/PastIssues2006/June2006/ClinicalTonkinJune2006/tabid/2529/Default.aspx>. Accessed Sep 30, 2010.
13. American Physical Therapy Association. APTA Vision Sentence for Physical Therapy 2020. Alexandria, VA: APTA; Oct 2011. Available at: <http://www.apta.org/vision2020/>. Accessed Oct 5, 2011.
14. Commission on Accreditation in Physical Therapy Education. CAPTE to require DPT effective 12/31/2015. *CAPTE Accreditation Update* 2010;15(1). Available at: [http://www.capteonline.org/uploadedFiles/CAPTEorg/About\\_CAPTE/Resources/Accreditation\\_update/AccreditationUpdate\\_0110.pdf](http://www.capteonline.org/uploadedFiles/CAPTEorg/About_CAPTE/Resources/Accreditation_update/AccreditationUpdate_0110.pdf). Accessed Oct 1, 2010.
15. Johnson L. Debt therapy: a finance-based approach. *Perspectives Magazine* [APTA]. 2010; Jan:20–23.
16. Dorsey ER, Nincic D, Schwartz JS. An evaluation of four proposals to reduce the financial burden of medical education. *Acad Med* 2006; 81(3):245–251.
17. Zonia SC, Stommel M, Tomaszewski DD. Reasons for student debt during medical education: a Michigan study. *JAOA* 2002;102(12): 669–675.
18. Redman-Bentley D. Setting a realistic tuition for physical therapist education programs based on expected income: a survey of physical therapy directors. *J Phys Ther Educ* 2004;18(2):31–38.
19. Little T. The false wisdom of tuition based ranking of allied health programs: is your program affordable? *Internet J Allied Health Sci Pract* 2006;4(1):1-6. Available at: <http://ijahsp.nova.edu>. Accessed Oct 1, 2010.
20. Kerr JR, Brown JJ. Costs of a medical education: comparison with graduate education in law and business. *J Am Coll Radiol* 2006;3(2): 122–130
21. *Your Federal Student Loans: Learn the Basics and Manage Your Debt*. Jessup, MD: U.S. Department of Education Federal Student Aid, 2009.
22. College Board. Loan repayment and debt [webpage]. New York: College Board; n.d. Available at: <http://www.collegeboard.com/student/pay/loan-center/432.html>. Accessed Oct 6, 2010.
23. Baum S, Schwartz S. How much debt is too much?: defining benchmarks for manageable student debt [webpage]. The Project on Student Debt website. New York: College Board; 2006. Available at: [http://projectonstudentdebt.org/files/pub/Manageable\\_Debt\\_FINAL\\_4.20.06.pdf](http://projectonstudentdebt.org/files/pub/Manageable_Debt_FINAL_4.20.06.pdf). Accessed Oct 6, 2010.
24. US Department of Labor, Bureau of Labor Statistics. *Occupational Outlook Handbook, 2010–11 Edition: Physical Therapists*. Washington, DC: US Dep of Labor; n.d. Available at: <http://www.bls.gov/oco/ocos080.htm>. Accessed Nov 5, 2010.