



# Partnering for Mentorship and Growth of Occupational Therapy Pro Bono Clinic Student Leaders across Two Universities

Courtney Kirouac, OTD; Jill D Black, PT, DPT, EdD; Wendy Wachter-Schutz, OTD, MS; Kristy L Meyer, OTD, MS

<sup>1</sup>Widener University, Chester, Pennsylvania, USA

**Corresponding Author:** Kristy L Meyer, OTD, MS; email: [jdblack@widener.edu](mailto:jdblack@widener.edu)

**Published:** July 24, 2025

## Abstract

**Background:** Student participation in free or pro bono clinics has been shown to enhance student learning and meet community needs. Student leadership of pro bono clinics is growing in occupational therapy (OT) programs. This article's purpose is to describe a capstone experience where an OT student leader aimed to build self-efficacy in a group of OT student leaders from another university seeking to grow their pro bono service.

**Methods:** A needs assessment informed the development of an eight-week intervention program providing materials and education needed to increase self-efficacy of student leaders in a newly launched OT pro bono clinic. The instructional intervention topics included billing and electronic health record navigation, client intake process, and marketing materials. The primary investigator developed a survey base on social cognitive theory to measure student leader self-efficacy pre-and post-intervention.

**Results:** Pre- and post-survey test results demonstrated a statistically significant increase ( $p < 0.05$ ) in self-efficacy in new student leaders in three categories: billing and electronic health records, formal client intake, and obtaining new clients.

**Conclusions:** A peer mentor from another university providing education materials and administrative assistance in alliance with ongoing needs assessment enhanced the perceived self-efficacy of OT student leaders seeking to enhance their pro bono OT services.

## Introduction

Literature demonstrates that pro bono clinic participation provides students with an early opportunity to develop their clinical skills prior to full-time fieldwork or clinical experiences,<sup>1-3</sup> enhances appreciation for the complexities of access to our healthcare system,<sup>4,5</sup> and may facilitate cultural humility.<sup>6</sup> Smith et al report that recipients of pro bono care report positive experiences and overall improvements in functioning.<sup>7</sup> Black et al found that student leaders of a pro bono clinic perceived increased administrative skills and enhanced awareness of social responsibility.<sup>8</sup>

The operation of free clinics associated with educational programs began with medical schools and has expanded to include physical therapy (PT) and more recently, occupational therapy (OT) programs.<sup>9</sup> Yue et al.<sup>10</sup> surveyed OT programs in 2020 and found that of the 118 responding programs, 15 were involved in a student-run free clinic and 30 expressed interest in starting but cited barriers such as lack of resources. OT programs offered at the doctoral level require completion of a doctoral capstone project. The doctoral capstone experience and project entails a deep investigation of a specific area such as clinical skills, research, administration, program development, policy development,

advocacy, education, or leadership and application of this learning in a specific project, usually in the student's final year of study.<sup>11</sup>

In 2019, Widener University in Chester, Pennsylvania launched its OT program at the doctoral level and simultaneously integrated OT services into the existing student-run PT pro bono clinic.<sup>12</sup> OT student leaders perform administrative duties such as scheduling, marketing, fundraising, outcome tracking, and operations alongside the PT student leaders. The findings from Yue et al<sup>10</sup> account the desire of several OT programs to begin delivery of pro bono services but are hindered by barriers such as limited resources. The purpose of this research report is to account a capstone project where an OT student leader from a university with an established pro bono clinic mentored new student leaders at another university with the aim of enhancing resources and building the new student leaders' self-efficacy in the growth and development of an OT pro bono service center for their community.

## Methods

Western New England is a university in Springfield, Massachusetts who responded to a call for mentorship of their student leaders. The OT program had recently established a student-run OT center which opened in the fall of 2022 and welcomed participating in this doctoral capstone project.<sup>13</sup> The primary investigator conducted an initial needs assessment with the faculty advisor and the student leaders to determine their highest priority of needs in order to develop educational programming and materials that would be most useful to them.

Social Cognitive Theory (SCT) was the guiding framework used to measure increased self-efficacy in the student leaders. Self-efficacy refers to "an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments".<sup>14</sup> SCT focuses on building self-efficacy by utilizing human agency which is the capacity to influence self and others.<sup>15</sup> This project includes four core concepts of human agency: intentionality, forethought, self-reactivity, and self-reflection.<sup>15</sup> Each of these concepts assisted with the project's intention, material production, participant motivation, and reflection on gained self-efficacy.

This study utilized an investigator-developed seven-item quantitative survey to evaluate pre and post changes in participants' perceived levels of confidence with the 8-week intervention plan. The survey required participants to rate their confidence across domains including client acquisition, managing the formal intake process, navigating the electronic medical record system and billing procedures, marketing the clinic, interprofessional collaboration, enthusiasm for clinical practice, and the importance of clinic expansion, all using a ten-point Likert scale. Appendix A displays the survey instrument in detail. An email with a survey link was sent to thirty-three students by the primary investigator. All responses were collected anonymously. The survey data were analyzed to evaluate changes in self-efficacy by computing the mean for each response, which provided a measure of central tendency. To identify significant differences between the distributions of two independent groups, the Mann-Whitney U Test was utilized. This nonparametric test assesses whether the distributions of two independent samples differ significantly, testing the null hypothesis that both samples come from the same population.<sup>16</sup> Additionally, Cohen's *d* was employed to evaluate the effect size, quantifying the magnitude of differences observed. This study received ethical approval from Widener University's Human Subjects Ethics Committee.

## Results

In response to the needs assessment, the primary investigator created and delivered operational, administrative, and outreach resources and enhancements over eight weeks. The priorities and deliverables that faculty and student participants identified in the initial needs assessment are depicted in Table 1. Operational resources included tips for session preparation and documentation; instructional billing video and billing code cheat sheet; a demonstration of an electronic health record

**Table 1.** Needs assessment requests and deliverables

---

Operational Resources & Enhancements
Billing Resources with creation of billing video & cheat sheet for reference
Documentation & treatment preparation tips
Assessment Tool Kit for student reference
Electronic health record demo meeting with potential for adoption
Administration Resources & Enhancements
Adoption of Google Voice* for uniform distribution of duties
Revision of Center Policy & Procedure Manual and Handbook
Program Expansion & Outreach
Creation of marketing brochure
Established a Continuing Education Unit document for licensed volunteers
Grant application with award of \$1700
Facilitated Student Leadership presentation at the 2023 National Pro Bono Network Conference

---

\*Google Voice (free version, 2009, Google LLC, Mountain View, CA)

system for potential adoption; and an Assessment Tool Kit to guide clinical assessment. The Assessment Tool Kit included a list of standardized assessments for use during OT evaluations and re-evaluations, with criteria detailing their purpose, when to utilize, and applicable age range. Specific to administration, the primary investigator supported the adoption of Google Voice (free version, 2009, Google LLC, Mountain View, CA) to allow student leaders to share the communication responsibilities and assisted in the revision of the Center Policy & Procedure Manual & Handbook. Revision of the Handbook further defined and clarified policies and procedures for the intake of new clients. Outreach enhancements included the creation of a marketing brochure, the initiation of a continuing education credit document for licensed volunteers, procurement of a \$1700 grant for the purchase of additional equipment and center supplies, and facilitation of the student leadership team's proposal, acceptance, and deliverance of a presentation at the 2023 National Pro Bono Network Conference.

Nineteen participants completed the pre-survey (a response rate of 57.60%) and fifteen completed the post-survey (a response rate of 45.50%). The participants were first- and second-year students completing their entry-level doctorate in occupational therapy at Western New England. Table 2 provides a summary of the effect sizes, Mann-Whitney U test results, and mean scores for the seven quantitative survey questions. The results indicated that the mentorship program significantly influenced students' confidence levels in the specified areas of billing/electronic health record navigation ( $p < 0.05$ ), formal intake process of the clients ( $p < 0.05$ ) and obtaining new clients ( $p < 0.05$ ). All survey questions exhibited a large effect size, except the question concerning the importance of clinic expansion, which demonstrated a medium effect size.

## Discussion

This project explored the effectiveness of an 8-week program consisting of administrative training, education, and development of resources on perceived self-efficacy in students who run an occupational therapy pro bono center. The data demonstrated a statistically significant increase in confidence regarding medical billing, the formal intake process with clients, and obtaining new clients. The outcomes of this capstone project indicated a positive correlation between administrative materials and education provided by the primary investigator. Yue et al had identified that more OT programs nationwide wish to start involvement in OT pro bono services but cited barriers such as lack of resources.<sup>10</sup> The findings of this study demonstrate that a peer mentor model across institutions can help overcome barriers.

**Table 2.** Statistical significance of pre- and post-survey Likert scale questions with mean comparison

Question (Likert Scale 1-10)	Cohen's D	p value	Pre-survey Mean (n=19)	Post-survey Mean (n=15)
What is your perceived level of confidence in obtaining new clients?	-2.64	0.01	5.36	7.30
What is your perceived level of confidence in the formal intake process of your clients?	-2.53	0.01	5.68	7.53
What is your perceived level of confidence in navigating an electronic medical record system and billing?	-3.00	0.003	2.68	5.93
What is your perceived level of confidence in marketing the clinic to the community and other healthcare professionals?	-1.73	0.083	5.57	7.26
What is your perceived level of confidence in interprofessional collaboration with fellow students and clinic supervisors?	-1.63	0.10	6.73	8.10
What is your level of enthusiasm when treating in the clinic?	-1.47	0.14	6.94	8.10
How important is it to you for the clinic to expand?	-0.36	0.72	3.57	3.60

Additionally, this current study demonstrates how peer mentorship across universities can help advance resources and student leaders' perceived self-efficacy in the growth of pro bono services as this mentorship program positively influenced students' confidence levels in the specified areas of billing/electronic health record navigation, formal intake process of the clients and recruitment of new clients. Peer supervision or peer collaborative learning are PT and OT models of education that have been described by Rindflesch et al<sup>17</sup> and found to be effective in in the clinical education or fieldwork setting with positive learning results.<sup>18,19</sup> Paparella-Pitzel et al<sup>20</sup> stumbled upon the effectiveness of a peer mentorship within their student-run PT clinic while investigating the benefits of participation. Their research surveyed both first- and second-year PT student participants and their findings depicted benefits of learning from peers. Murphy-Hagan and colleagues have specifically studied<sup>21</sup> and are nurturing<sup>22</sup> the peer mentorship collaborative model in an OT student-run free clinic. They first identified the need for peer mentorship training<sup>21</sup> and then developed a peer mentorship training program to meet this need.<sup>22</sup> Both Paparella-Pitzel<sup>20</sup> and Murphy-Hagan's<sup>21,22</sup> work has been situated in pro bono services within one university. These works corroborate the findings of this study of the benefits and effectiveness of peer mentorship.

Limitations of this study included a small sample size, the lack of Likert scale anchors on the survey, and participant attrition between the pre- and post-surveys. The absence of Likert scale anchors may have impacted the consistency and clarity of responses, as participants might interpret the scale differently, leading to variability in their ratings and potentially affecting the reliability and validity of the data. Additionally, only quantitative survey data was formally collected, while qualitative data was gathered informally and not used in the formal assessment. Attrition also posed a potential source of bias, with response rates decreasing from 57.60% for the pre-survey to 45.50% for the post-survey. This reduction in participants may introduce bias, as those who did not complete the post-survey might have different views and experiences compared to those who did, which could influence the generalizability and interpretation of the results.

Recommendations for future research include formally collecting qualitative data to gain deeper insights into participants' perspectives throughout the study. Given that the current study covers a brief period of 8 weeks, conducting a longitudinal study would be beneficial to evaluate the long-term sustainability of the interventions and track the development of services and student leadership self-efficacy over time. Expanding the sample size would also improve the robustness and generalizability of the findings. Additionally, using Likert scale anchors in the survey could enhance the consistency and clarity of responses, improving the reliability and validity of the data. Finally, developing strategies to reduce participant attrition, such as providing incentives or streamlining the survey process, would help ensure higher retention rates and minimize potential biases in the results.

## Conclusions

A peer mentor from another university providing education materials and administrative assistance in alliance with ongoing needs assessment effectively enhanced the perceived self-efficacy of OT student leaders seeking to enhance their delivery of pro bono OT services. This model of peer collaborative learning and mentorship across universities may help support desired growth of pro bono services.

## Acknowledgements

The authors would like to thank Dr. Brittany Adams and the OT student leaders of Western New England for partnering in the project.

## Disclosures

The authors have no conflicts of interest to disclose.

## References

1. Gilles J, Bishop M, McGehee W, Lulofs-MacPherson K, Dunleavy K. Impact on clinical performance of required participation in a student-run pro bono clinic. *J Phys Ther.* 2019;33(3):209-214. doi:10.1097/JTE.000000000000083 [LINK](#)
2. Walter R, Bresnahan K. Implementing an Occupational Therapy Student-Run Clinic at the University of North Dakota [master's thesis]. University of North Dakota; 2019. <https://commons.und.edu/ot-grad/405/> [LINK](#)
3. Rezaee M, Rassafiani M, Khankeh H, Hosseini MA. Experiences of occupational therapy students in the first fieldwork education: a qualitative study. *Med J Islam Repub Iran.* 2014;28:110. [LINK](#)
4. Blausey J, Valdes K. Feasibility of a student-run pro bono clinic: a survey study. *Am J Occup Ther.* 2021;75(2). doi:10.5014/ajot.2021.75S2-RP207 [LINK](#)
5. Wynne D, Cooper K. Student-led rehabilitation groups and clinics in entry-level health education: a scoping review. *JBI Evid Synth.* 2021;19(11):2958-2992. doi:10.11124/JBIES-20-00340 [LINK](#)
6. Morris S, RuiPing X, Klaassen T, Johnson T. Impact of pro bono clinic on attitudes, beliefs, and confidence towards cultural competence in first-year doctoral physical therapy students. *Internet J Allied Health Sci Pract.* 2021;19(4):1-8. doi:10.46743/1540-580X/2021.2092 [LINK](#)
7. Smith N, Radwan H, Petro H, Ibe P, Fain E. Impact of physical and occupational therapy interventions on health-related quality of life in patients receiving treatment in a pro bono clinic: a pilot study. *J Best Pract Health Prof Divers.* 2019;12(1):58-71. [LINK](#)
8. Black JD, Palombaro KM, Dole RL. Student experiences in creating and launching a student-led physical therapy pro bono clinic: a qualitative investigation. *Phys Ther.* 2013;93(5):637-648. doi:10.2522/ptj.20110430 [LINK](#)
9. Crandell CE, Black JD, Dole RL, Palombaro KM. The prevalence and characteristics of physical therapy pro bono services involving doctor of physical therapy students. *Internet J Allied Health Sci Pract.* 2020;18(2):13-22. doi:10.46743/1540-580X/2020.1898 [LINK](#)
10. Yue JW, Delavar M, Padini B, Vanstrum E, Milman T. The value of occupational therapy student participation in university-based student-run free clinics in the United States. *J Occup Ther Educ.* 2021;5(4):Article 13. doi:10.26681/jote.2021.050413 [LINK](#)
11. Deluliis E, Bednarski J. *The Entry Level Occupational Therapy Doctorate Capstone: A Framework for the Experience and Project.* Slack Inc; 2020. ISBN: 978-1-63091-611-4.
12. Palombaro KM, Dole RL, Lattanzi JB. A case report of a student-led pro bono clinic: a proposed model for meeting student and community needs in a sustainable manner. *Phys Ther.* 2011;91(11):1627-1635. doi:10.2522/ptj.20100437 [LINK](#)
13. Western New England University. Doctor of occupational therapy. Accessed January 11, 2024. <https://wne.edu/pharmacy-and-health-sciences/academics/otd/index.cfm> [LINK](#)
14. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. *Psychol Rev.* 1977;84(2):191-215. doi:10.1037//0033-295x.84.2.191 [LINK](#)
15. Cole M, Tufano R. *Applied Theories in Occupational Therapy: A Practical Approach.* Slack Inc; 2020. ISBN-13: 978-1-61711-636-0.
16. Portney LG. *Foundations of Clinical Research: Applications to Evidence-Based Practice.* 4th ed. FA Davis; 2020.
17. Rindfleisch AB, Dunfee HJ, Cieslak KR, et al. Collaborative model of clinical education in physical and occupational therapy at the Mayo Clinic. *J Allied Health.* 2009;38(3):132-142. [LINK](#)
18. Hanson DJ, Deluliis ED. The Collaborative Model of Fieldwork Education: a blueprint for group supervision of students. *Occup Ther Health Care.* 2015;29(2):223-239. doi:10.3109/07380577.2015.1011297 [LINK](#)
19. Kinsella AT, Piersol CV. Development and evaluation of a Collaborative Model Level II Fieldwork program. *Open J Occup Ther.* 2018;6(3):14. doi:10.15453/2168-6408.1448 [LINK](#)
20. Paparella-Pitzel S, Anderson EZ, Rothpletz-Puglia P, Parrott JS. Exploring physical therapy students' experience of peer learning in a student-run clinic. *J Educ Health Promot.* 2021;10:400. doi:10.4103/jehp.jehp\_188\_21 [LINK](#)
21. Murphy-Hagan A, Milton LE. Qualitative analysis of peer supervision training needs in a student-run occupational therapy clinic. *J Occup Ther Educ.* 2019;3(2). doi:10.26681/jote.2019.030206 [LINK](#)
22. Murphy-Hagan A, Milton LE. The Critical Friend: development of a peer supervision training for a student-run occupational therapy clinic. *J Occup Ther Educ.* 2020;4(2). doi:10.26681/jote.2020.040207 [LINK](#)