A PHENOMENOLOGICAL STUDY OF PREDOCTORAL DENTAL STUDENTS' EXPERIENCES WITH SERVICE-LEARNING

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ABSTRACT

The purpose of this qualitative phenomenological study is to understand predoctoral dental students' lived experiences with service-learning (SL) in general dentistry and explore how these experiences influence their perceptions of community service and future professional practice. Purposive sampling will be used to identify predoctoral students from dental schools with SL rotations that satisfy the study criteria. A SL rotation in this study is defined as an experiential learning approach that aims to encourage civic awareness and participation. The sample for this study is senior predoctoral dental students enrolled in an accredited dental school program in the United States that participate in a SL clinical rotation during their dental education training. Data will be collected by performing virtual semi-structured interviews. Data analysis includes an iterative process and inductive approach where a thematic framework is developed to create an initial list of codes and analyze data to develop themes and descriptions of the participants' experiences and report the essence of the phenomenon. SL experiences in dental schools vary in their organization, structure, type of assessments used, length of the experience, and type of learning site. It is not clear whether students get comparable SL experiences that might impact their perspectives on community service and future professional practice. In addition, this study will expand the understanding of Mezirow's (2000) transformative learning theory and add to the base of the theoretical literature. Particularly, dental students SL clinical experiences might present a disorienting dilemma which is connected to the initiation of the transformative learning process.

BACKGROUND

Service learning is defined as an education experience in which students are involved in a service activity that is structured within a course (Bringle &Hatcher, 1996). SL does not only prepare competent health professionals who support the community, it is also a way to promote citizenship, encourage social change and improve the health of the community (Seifer, 1998) SL supports a recognized community need and allows students to experience a deeper learning of the course content (Figure 1). Students perform real world tasks where they can apply skills learned ans demonstrate their abilities as well as become more confident (Stewart & Wubbena, 2014).

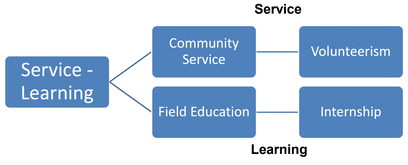

Figure 1: Service-learning - Adapted from Furco, 1996

The foundation of SL was developed from Dewey's and Kolb experiential learning theory (Dewey, 1963; Kolb, 1984). SL is a type of experiential learning that connects the learning goals of the students with social issues and gives them opportunities for academic and professional growth that are difficult to provide in a traditional setting without interaction with the community (Champagne, 2006; Leonard, 2023). The reflective process that is part of the SL experience promotes understanding of the material because learning is multidirectional and students, instructors and the community benefit from the experience (Figure 2) (Dewey, 1963; Tai-Seale, 2001).

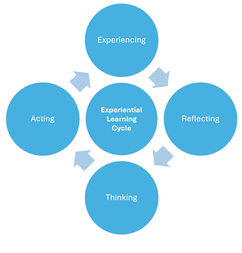

Figure 2: Experiential Learning Cycle – Adapted from Kolb (1984)

One of the main benefits of SL is the ability to encourage civic engagement and social responsibility during the students' dental education (Hood, 2009). SL provides reciprocal learning where everyone involved learns from the other and it can also provide opportunities for dental students to work with other professions in community clinics and see how the health care system operates (Hood, 2009)

THEORETICAL BACKGROUND

The theoretical framework for this study is based on Mezirow's (2000) theory of transformative learning. Transformative or transformational learning refers to "change in the way we see ourselves and the world in which we live" (Merriam et al., 2020, p. 166). Important concepts in transformational learning include experience, critical reflection, and reflective communication and action (Merriam et al., 2020). Mezirow proposed that learning not only adds knowledge but also transforms the learner.

Mezirow (2000) defines learning as the utilization of previous understanding of knowledge to build new or adjusted understandings which will influence future actions.

transformative learning occurs when one is introduced to a new situation or disorienting dilemma and needs different frames of reference through which to view the world (Mezirow, 2000). SL experiences present excellent opportunities to introduce dental students to new situations in the real world that can foster critical reflection, which occurs when they question their previously held assumptions and beliefs, thereby, promoting transformation. During SL, students might go through the transformative learning phases, develop the process of critical reflection, change their perspectives, and search for new actions and roles.

PURPOSE OF THE STUDY

The purpose of this qualitative phenomenological study is to understand predoctoral dental students' lived experiences with service-learning in general dentistry and explore how these experiences influence their perceptions of community service and future professional practice.

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This study will examine academic SL and co-curricular SL, but not volunteer community service. Academic SL refers to SL that is credit-based coursework, supervised by a faculty member and part of the formal academic curriculum (Clayton et al., 2012). Co-curricular SL is not a component of a specific course or discipline; however, it is a complement of the curriculum and supports a comprehensive and well-rounded education (Bringle & Hatcher, 1996).

RESEARCH QUESTIONS

This study will be guided by the following research questions.

- Central Research Question
  - What are the lived experiences of predoctoral dental students who have completed a service-learning rotation in general dentistry?
- Sub-Question One
  - How do predoctoral dental students perceive community service after completing a service-learning rotation in general dentistry?
- Sub-Question Two
  - How do predoctoral dental students perceive their future professional practice after completing a service-learning rotation in general dentistry?

METHODOLOGY

Research Design: This qualitative research study will use a phenomenological design to explore dental students' experiences during a SL rotation. Qualitative research collects participants experiences, perceptions, and behaviors to understand real-world problems (Tenny et al., 2023). A phenomenological design is the most appropriate for this study to best understand the experiences and perspectives of predoctoral dental students during SL in general dentistry. This method will allow the dental students participating in the study to explain how, why, or what they experienced during the SL rotation and allow the students to share their experiences and perspectives.

Participants and Sampling: The sample for this study will be predoctoral dental students enrolled in a 4-year accredited dental school program in the United States that have experienced a SL clinical rotation during the clinical training portion of their dental education program. A SL rotation in this study is defined as an experiential learning approach that aims to encourage civic awareness and participation (Jacoby & Howard, 2014), Purposive sampling will be used to identify predoctoral fourth-year students from dental schools with SL rotations that satisfy

- **Inclusion Criteria -** Dental students currently enrolled in at a dental school accredited by the Commission on Dental Accreditation (CODA) who are in their fourth year of dental school, who have participated in a SL clinical rotation of at least 2 weeks in duration, which was connected to a credited course and the course objectives and included a reflective paper or reflective discussion after the SL experience

Procedures: Approval to conduct the study was given by the University of Maryland Baltimore Institutional Review Board (IRB HP – 00109209).

- A screening survey was sent to all dental schools to identify the type of SL conducted at their school
- Individuals from dental school that offer SL experiences that correspond to the established criteria will be contacted and asked to share the study information with D4 students
- Data will be collected from 45-60 minute semi-structured interview (virtual) to D4 students that chose to participate and complete the informed consent.
- The interview will include questions concerning transformative learning
- A reflection journal will be completed after each interview
- A thematic framework will be developed from an initial list of key words using data analysis software, Dedoose.

Trustworthiness : Specific criteria should be considered in qualitative research to ensure a trustworthy study. The criteria that a qualitative investigator should consider are credibility, transferability, dependability, and confirmability to show that the research measured what it was planned to do, it could be applied to other contexts, the results could be reproduced, and the researcher presented the results without bias (Guba, 1981; Shenton, 2004)

REFERENCES

1. Bringle, R. G., & Hatcher, J. A. (1996). Implementing service learning in higher education. *The Journal of Higher Education*, *67*(2), 221-239. https://doi.org/10.2307/2943981
2. Champagne, N. (2006). Service learning: Its origin, evolution, and connection to health education. *American Journal of Health Education*, *37*, 97-102. https://doi.org/10.1080/19325037.2006.10598885
3. Clayton, P. H., Bringle, R. G., & Hatcher, J. A. (2013). *Research on service learning: Conceptual frameworks and assessment*. Stylus Pub. https://books.google.com/books?id=wWbNAQAAQBAJ
4. Dewey, J. (1963). *Experience in education*. Macmillan.
5. Furco, A. (1996). Service-Learning: A Balanced Approach to Experiential Education.
6. Guba, E. G. (1981). ERIC/ECTJ Annual review paper: Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology*, *29*(2), 75-91. http://www.jstor.org/stable/30219811
7. Hood, J. G. (2009). Service-learning in dental education: Meeting needs and challenges. *Journal of Dental Education*, *73*(4), 454-463. https://www.ncbi.nlm.nih.gov/pubmed/19339432
8. Jacoby, B., & Howard, J. (2014). *Service-learning essentials: Questions, answers, and lessons learned*. Wiley. https://books.google.com/books?id=Q0fxBQAAQBAJ
9. Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
10. Leonard, G., Lassiter, J. W., Hammill, R., & LeCrom, C. W. (2023). Service-learning and the development of interpersonal skills in pre-professional undergraduate students. *Pedagogy in Health Promotion*, *9*(2), 82-91. https://doi.org/10.1177/23733799221074626
11. Mezirow, J. D. (2000). Learning as transformation: critical perspectives on a theory in progress. The Jossey-Bass higher and adult education series.
12. Seifer, S. D. (1998). Service-learning: Community-campus partnerships for health professions education. *Academic Medicine*, *73*(3), 273-277. https://doi.org/10.1097/00001888-199803000-00015
13. Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*(2), 63-75. https://doi.org/10.3233/EFI-2004-22201
14. Stewart, T., & Wubbena, Z. (2014). An overview of infusing service-learning in medical education. *International Journal of Medical Education*, *5*, 147-156. https://doi.org/10.5116/ijme.53ae.c907
15. Tai-Seale, T. (2001). Liberating service learning and applying the new practice. *College Teaching*, *49*(1), 14-18. http://www.jstor.org/stable/27559023