

Comparison of delivery methods of an interprofessional education activity for occupational therapy and physical therapy students

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Background

- Physical rehabilitation is completed by several health care professionals including occupational therapists (OT) and physical therapists (PT).
- OT and PT professions overlap in some responsibilities but have unique areas of expertise.¹ It is important for OT and PT students to understand these similarities and differences.
- The *Introduction to IPE* event for OT and PT students focuses on the teams and teamwork and roles and responsibilities of the IPEC competencies.²
- In the fall of 2020, COVID changed how classroom and IPE activities were delivered. This mixed-methods study seeks to compare learning outcomes from a traditional face-to-face delivery (2019) to an online delivery of an IPE event (2020).

Purpose

The purpose of this mixed methods study is to compare learning outcomes from a traditional face-to-face to an online delivery of an interprofessional education activity with a group of OT and PT students.

Methods

- Occupational therapy and physical therapy students were placed into small groups consisting of one OT student and 2-3 PT students.
- The students were instructed to complete the Readiness for Interprofessional Learning Scale (RIPLS) pre-activity; to watch an introductory video of the authors (ST and JW) answering the interview questions; connect with their group members and arrange for an online meeting. During this online meeting, students followed a structured outline provided by the instructors. After the meeting, students completed a reflection of the encounter and the post-activity RIPLS. Students then completed a written reflection of the activity addressing how their knowledge increased about the OT and PT professions and interprofessional collaboration.
- The pre- post-test RIPLS was analyzed using SPSS. Comparisons of pre- to post- for the 2020 cohort and the 2019 cohort was compared to the 2020 cohort.
- The de-identified reflections were analyzed to identify common themes. Results from 2020 (online delivery) were compared with 2019 (face-to-face delivery).

Quantitative Results

| | 2019 Results | | 2020 Results | |
|--------------------------------|--|----------------|--|----------------|
| OT students/PT students | OT = 13; PT = 45 | | OT = 20; PT = 45 | |
| Age (years) | 23.6 (SD = 2.4) | | 24.4 (SD = 3.5) | |
| Gender (Female/Male) | Female (n = 45) 77.6% Male (n = 13) 22.4% | | Female (n = 43) 66.2% Male (n = 22) 33.8% | |
| | Pre-Mean (SD) | Post-Mean (SD) | Pre-Mean (SD) | Post-Mean (SD) |
| Total pre-RIPLS | 85.8 (7.4) | 87.1 (7.1) | 83.7 (7.3) | 86.8 (6.7) |
| Teamwork | 41.0 (3.9) | 42.0 (3.7) | 41.5 (3.5) | 43.0 (3.1) |
| Negative professional identity | 13.8 (1.3) | 13.8 (1.6) | 12.9 (2.4) | 13.5 (2.0) |
| Positive professional identity | 17.2 (2.6) | 17.6 (2.3) | 17.8 (1.9) | 18.5 (1.8) |
| Roles and responsibilities | 12.9 (1.2) | 13.1 (1.4) | 11.6 (1.9) | 11.9 (2.0) |

When reviewing the entire sample, there was a statistically significant difference between pre and post RIPLS ($p < 0.001$) in the 2020 sample; however, when splitting the sample into profession, the DPT did not show a difference ($p < 0.001$) while the OT students did show a statistically significant difference ($p = 0.600$).

Qualitative Results

- The themes of the 2019 reflections and the 2020 reflections were similar including personal experiences influenced career choice; observation experiences shaped understanding of interprofessional collaboration; the two professions have both similarities and differences; looking forward to future opportunities. Additional themes included imbalance in group size (one OT student with two to three PT students per group). This led to several of the OT students expressing feelings of power imbalance. Another additional theme was the online format, influenced by COVID restrictions on face-to-face learning.

| 2019 Themes | 2020 themes |
|---|---|
| Personal experiences led me to become an occupational therapist or physical therapist. | Personal experiences led me to become an occupational therapist or physical therapist. |
| Observation experiences have shaped my knowledge of occupational therapy and/or physical therapy and interprofessional collaboration. | Observation experiences have shaped my knowledge of occupational therapy and/or physical therapy and interprofessional collaboration. |
| Occupational therapy and physical therapy have similarities. | Occupational therapy and physical therapy have similarities. |
| Occupational therapy and physical therapy have differences. | Occupational therapy and physical therapy have differences. |
| Future opportunities | Future opportunities |
| | Imbalance of PT to OT numbers within group |
| | Influence of COVID on learning |

Lessons Learned

- The *Introduction to IPE* activity originally designed to be done face-to-face was able to successfully be transitioned to an online format.
- The response rate increased between 2019 (63.7%) and 2020 (81.3%).
- There were no meaningful differences between 2019 and 2020 RIPLS scores. This was consistent for pre-RIPLS and post-RIPLS.
- Delivery of this IPE event was feasible in an online environment. This IPE event can be completed in a variety of formats allowing flexibility in pedagogic delivery methods.

Future Application and Next Steps:

- Exploration of further online IPE activities that will continue to develop the interprofessional competencies required for these new professionals in order to meet the demands of an ever changing world.
- Use of online delivery of IPE could expand possible collaborations with other physical rehabilitation departments outside of those at the University of Michigan Flint. Some examples include Speech-Language Pathology and Recreational Therapy.
- Considerations for cohort sizes and power imbalance should be considered when designing IPE activities.

References

- Schwab SM & Zeleznik AJ. Using the Language of the ICF to Distinguish Physical Therapy and Occupational Therapy Services in the Acute Care Setting. *J Acute Care Phys Ther.* 2020;11(1):40-43.
- Interprofessional Education Collaborative. (2016). Core competencies for interprofessional collaborative practice: 2016 update. Washington, DC: Interprofessional Education Collaborative.