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Impact of Interprofessional vs Non-interprofessional Continuing Education Activities on Learning, Competence, and Performance Pertaining to Interprofessional Collaborative Practice

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Purpose/Problem Statement/Scope of Inquiry

The University of Wisconsin-Madison Interprofessional Continuing Education Partnership (ICEP) conducts an annual survey of participants in the ICEP-accredited activities. Analysis of responses to open-ended questions about the educational impact from the 2016-2020 surveys documented that reported changes in competence and performance resulting from participation in interprofessional (IP) as well as non-interprofessional (non-IP) activities included statements consistent with collaborative practice. This observation and a transition from open-ended to multiple choice survey questions pertaining to the educational impact created an opportunity to examine outcomes from IP activities in comparison with non-IP activities. We used the results of the 2021 survey to answer two questions. Did non-IP activities have impact in areas consistent with IP, collaborative practice? Was this impact comparable to the impact of IP activities? Moore's levels of evaluation and four domains of IP practice informed our inquiry.

Approach(es)/Research Method(s)/Educational Design

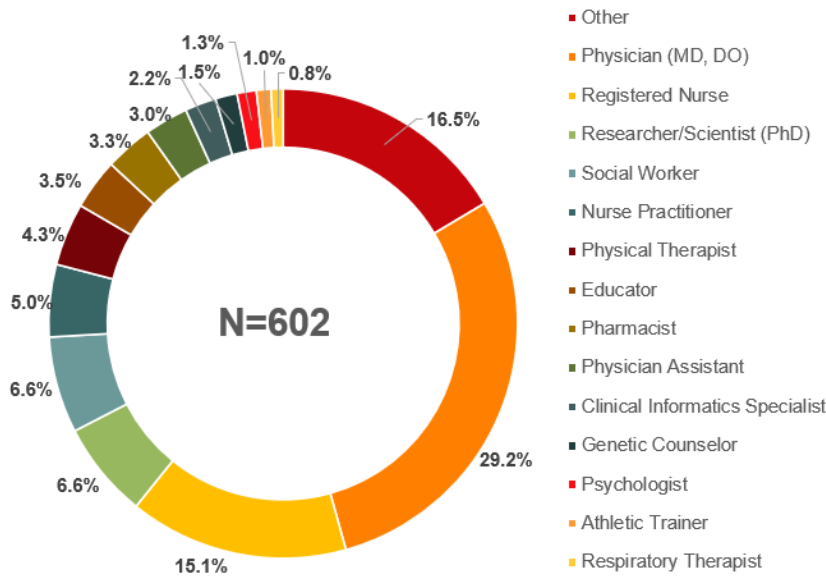
The survey included blocks of questions about live, enduring, and regularly scheduled series (RSS) activities. Respondents could select one activity they participated in (or none) from a list in each block, and then evaluate the selected activity by responding to the related questions. We analyzed responses to the following questions:

- Did participation in this activity impact your knowledge, attitudes, and/or skills/strategy/ability to act pertaining to your practice?
- Those who answered "yes", were asked: How did you change your knowledge, attitudes, and/or skills/ability to act? Respondents could select all that applied; 4 of 12 listed categories pertained to IP practice.
- Did participation in this activity impact your and/or your healthcare team performance/practice?
- Those who responded "yes", were asked: How did you and/or your healthcare team improve performance/practice? Respondents could select all that applied; 2 of 18 listed categories pertained to IP practice.

Responses pertaining to domains of IP practice were compared for IP activities vs non-IP activities using Fisher exact test with significance level $P < 0.05$.

Evaluation/Outcomes/Discussion

A total of 602 education participants representing more than 20 professions responded to the survey. Distribution by profession is shown in Figure 1 below.



Results for IP activities vs non-IP activities responses were as follows. Education impacted learning and competence: 89% of 341 respondents vs 91% of 127 respondents. Education impacted performance: 76% of 311 respondents vs 72% of 128 respondents. Those who reported impact specified changes by listed categories (Table 1 and Table 2). Applying values/ethics to IP practice: knowledge 52% vs 48%, attitude 14% vs 11%, competence 30% vs 23%. Communication with other professionals: knowledge 45% vs 40%, attitude 13% vs 9%, competence 32% vs 27%. Defining the roles/responsibilities: knowledge 44% vs 35%, attitude 14% vs 13%, competence 25% vs 24%. Working with an IP team: knowledge 44% vs 39%, attitude 15% vs 13%, competence 26% vs 23%. Collaboration between team members: learner performance 42% vs 38%, team performance 41% vs 29%. Communication with other healthcare professionals: learner performance 44% vs 35%, team performance 38% vs 29%. None of the comparisons showed a significant difference.

Table 1. Self-reported Changes in Knowledge, Attitude, and Competence.

	I Gained New Knowledge		I Changed My Attitudes		I Gained New Skills/Ability to Act	
	IP Activities	Non-IP Activities	IP Activities	Non-IP Activities	IP Activities	Non-IP Activities
Applying values/ethics to interprofessional practice	52%	48%	14%	11%	30%	23%
Communication with other professionals	45%	40%	13%	9%	32%	27%
Defining the roles/responsibilities of my team members	44%	35%	14%	13%	25%	24%
Working with an interprofessional team	44%	39%	15%	13%	26%	23%

IP activities: 303 respondents.

Non-IP activities: N=127 respondents.

The differences were not significant.

Table 2. Self-reported Changes in Performance/Practice.

Performance/Practice Related to	I Improved How I Practice		My Healthcare Team Improved Team Performance/Practice	
	IP Activities	Non-IP Activities	IP Activities	Non-IP Activities
Collaboration between healthcare team members	42%	38%	41%	29%
Communication with other healthcare professionals	44%	35%	38%	29%

IP activities: 237 respondents.
 Non-IP activities: N=92 respondents.
 The differences were not significant.

Key Learnings for CME/CPD Practice

All activities in our evaluation study had impact in the areas pertaining to IP practice, with no significant differences between IP and non-IP activities. Published studies comparing outcomes between IP and uniprofessional education of clinicians or clinicians-in-training show mixed results. For example, in a study conducted in the United Kingdom, nurses/midwives and foundation year doctors were assigned to either IP or uniprofessional groups to participate in a one-day simulation course. IP groups were associated with better outcomes for communication and teamwork.[1] Similarly, another European study showed better outcomes for communication and teamwork skills resulting from an IP course on diabetes for students of medicine, dentistry and nursing vs from the same education done as a uniprofessional course [2]. However, in a Korean study, an IP group of medical and nursing students and uniprofessional group of medical students participated in a class on team communication and IP collaboration; outcomes were measured by Interprofessional Attitudes Scale (IPAS) and the Self-Efficacy Perception for Interprofessional Experiential Learning (SEIEL) scale and were similar for both groups [3].

Intentional effort to change institutional culture towards embracing IP values may explain documented impact of IP and non-IP activities in our program. Additionally, employing our continuing education planning process that is supportive of collaborative, IP learning could influence the educational design and delivery of uniprofessional education for learners as members of the healthcare team, leading to the observed outcomes.

The results of our study could not be generalized to other settings, and educational strategies used in the evaluated activities were not considered in the analysis. Other limitations include self-reported data with a possibility of poor recall or social desirability bias. Future research is needed to explore how and why learning experience and resulting outcomes differ between IP and non-IP continuing education for healthcare professionals.

References

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3. Park YC, Park KH. Interprofessional education program for medical and nursing students: interprofessional versus uniprofessional. *Korean J Med Educ*. 2021;33(1):1-10. doi: 10.3946/kjme.2021.182. Epub 2021 Mar 2. PMID: 33735552; PMCID: PMC7973076.