Extrinsic and Intrinsic Elements that may Impact Students’ Perceptions of and Willingness to Internalize Interprofessional Education Program Goals
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Background

Given the increasing development and implementation of IPE programs within health professions education institutions, various evaluative efforts are underway to explore students’ perceptions of these programs, nuances of the interdisciplinary interactions within programs, and the potential long-term impact of these programs on students’ mentality towards team-based collaborative care. However, few have explored how these issues are impacted by factors nested within and outside of the IPE programs. Furthermore, evaluation-based efforts have regressed to (a) adopt a longitudinal approach, and b) examine multi-year IPE programs.

Methods

Twenty students were randomly selected from 6 different health disciplines to partake in n-depth semi-structured interviews at the end of year one and two of their interprofessional education program. The characteristics (gender and discipline of study) are available in Table 1 below. Nineteen of the twenty interviews were conducted over the phone, and one interview was conducted in-person. Interviews were conducted by a trained qualitative researcher, and lasted approximately 30 to 45 minutes. Students were asked questions about the following topics:

- How/why did they choose that particular health profession
- Where/when did they develop thoughts/perceptions about their own and other health professions
- How often are they able to associate with students from other disciplines – does the school provide opportunities
- Their thoughts on IPE in general, if schools should offer IPE programs, if IPEIPC should “taught” within discipline-specific curriculum
- Their thoughts on IPE in general
- Their thoughts on their specific IPE Program: general thoughts, experiences that had an impact, aspects that had a positive/negative impact, how it fostered (if at all) knowledge of collaborative care, suggestions for improvement, perceptions of students from other disciplines

Results

Students’ attitudes towards their IPE program that appear to impact their perceptions IPE aims/goals were categorized into: a) factors that were nested within the IPE program itself, and b) factors that appear to be influenced by elements “outside” of the IPE program. This categorization is depicted in the models presented below (not mutually exclusive). Although students expressed positively towards the program, and the experiences in the program, certain factors impacted the extent to which they were willing to engage with the aims and goals of the program.

Model 1: Prominent Extrinsic Elements (of IPE Program) Affecting Students’ Perceptions of IPE Program and, in turn, Affecting the Impact of IPE Programs’ Goals/Aims on Students and Students’ Ability and Willingness to Engage with Goals/Aims of IPE Program

<table>
<thead>
<tr>
<th>Discriminant</th>
<th>Male (%)</th>
<th>Female (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Nursing</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Social Work</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>11</td>
<td>37</td>
</tr>
</tbody>
</table>

Table 1: Characteristics of Interview Sample

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Qualitative Data Analysis Procedure

Data were analyzed utilizing a multi-step inductive and deductive coding process to identify patterns in students’ perceptions and attitudes toward their IPE program, and factors that could impact their ability and willingness to engage in the aims and goals of their IPE program. A two-person team read through each of the interview transcriptions (32 total) to identify recurring concepts, terms, and patterns among the T1 and T2 interviews – and to highlight recurring concepts, phrases, and terms regarding students’ attitudes towards their IPE program and what they cited as impacting their perceptions of IPE goals and aims. These inductive codes were then combined with deductive codes identified in previous research on this particular topic to develop the initial “code book.” In order to fully conceptualize categories of perceptions and attitudes among health profession students, comparisons were then made between the categories. As a result of these comparisons, 12 - no discernible differences were found between students of varying disciplines and interestingly, perceptions and attitudes regarding the IPE program and program aims/goals remained consistent from T1 to T2. Categories of perceptions and attitudes were then used as codes themselves to fully explore their nuances and intricacies.

Model 2: Extrinsic Elements (“outside” of IPE Program) Affecting the Impact of IPE Programs’ Goals/Aims on Students and Students’ Ability and Willingness to Engage with Goals/Aims of IPE Program

It was evident, from the data, that students came into their own discipline-specific training and the IPE program with preconceived notions and ideas of the abilities and expectations of their own and other health professions (Anticipatory Socialization), including in-group behavior of their own group, and negative stereotypes of other disciplines/professions. Although there was evidence of the “contact hypothesis” at work (especially for OT students), there was also evidence that stereotypes and negative perceptions were getting played out/whitewashed during the IPE program.

Students overwhelmingly discussed how they felt they did not yet understanding/comprehend the role(s) associated with their own future profession (Inefficient Professional Identity Formation) so it was very difficult for them to try to understand the role(s) of other health professions (and how the roles may/ may not overlap). This, according to the students, had a significant impact on their perceptions, in turn, were found to be associated with students’ willingness to engage with an interprofessional environment in their future practice/program, to embrace the “team mentality, and strive to learn more about/discipline/professions other than their own.

Conclusions and Implications

- All students reported truly enjoying working with the community-based, patient “leader” of their group (their “Health Mentor”) and meeting and working with other students.
- Students want more of it (informal get togethers with students from other health disciplines, and formal IPE program-related meetings)
- Students actually learned a lot about the patient through informal means such as chatting and talking about classes and coursework. → perhaps new evidence on how Contact Hypothesis may “work”, also supports why students consistently reported enjoying interacting with other students (and wanted more of it)
- Many reported enjoying Health Mentor because they were an actual “patient” – relates to the desire for more “real-life”, “in-action” experiences to better understand own role(s) and role(s) of other professions.

- Suitable for IPE program administrators and faculty to address extrinsic elements (aspects of Anticipatory Socialization, Lack of Professional Identity Formation)– so many want to focus on how can impact intrinsic elements
- Students reported desire for more “real-life” experiences/examples to engage in, or at least see team-based care “in action” – and could therefore learn more about own and other Role(s) (also addresses Role Specificity vs Role Blurring)
- Many report that they wanted explicit instruction on role(s) of different disciplines/professions before IPE program started, therefore could → Pre-IPE CITI-certification/training/educational program
- Vignettes during IPE, and IPE-related assignments (difficult to arrange, costful)
- Simulated patient exercises throughout IPE

- To foster more engagement with program goals/aims, IPE program administrators and faculty may need to emphasize student “buy-in” by increasing formal aspects of program (addressing Inefficient Formal “tension”), therefore could
- Require professional “dress”/attire to IPE meetings, provide formal feedback on assignments and project presentations, increase accountability for all disciplines involved in IPE program (i.e. all get grades)
- Follow the Testing Affect and the notion that Assessment Drives Learning → if students want to learn about material and “learn” material then you have to formally test them on that material

Future Directions

Future work needs to explore the juxtaposition or tension between the discipline-specific identity and the IPE (team-based) goal of Role Blurring. Research should examine how students navigate the potential enhanced social ambivalence associated with increased role ambiguity (stemming from role blurring), and techniques and mechanisms behind students’ role adjustment.

Future work should also focus on longitudinal assessments of a): internalization of goals/aims of IPE program and how this impacts their professional-level care delivery, and b): How this degree of internalization may vary by formal/informal nature of program.

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