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Valued Strategies in the Development and Implementation of Interprofessional Education Placements

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A thesis submitted in partial fulfillment of the requirements for the Master of Science degree in Health and Rehabilitation Sciences

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Abstract

Background: Interprofessional education (IPE) is increasingly being recognized as an essential component of training future healthcare providers. IPE allows students to learn collaboratively preparing them for future collaborative practice. **Purpose:** This study aimed to identify strategies valued by rehabilitation therapy students and clinical instructors in the development and implementation of IPE placements. **Method:** Through interviews and focus groups, this study explored the experiences and perspectives of students and clinical instructors regarding IPE placements for students in rehabilitation therapy programs. **Results:** Four major themes emerged from the findings of this study relating to the development and implementation of IPE placements. Themes included views on IPE placements, general structure, learning activities, and supervision. **Conclusion:** This study identified strategies valued by students and clinical instructors, as well as challenges that can inform the development and implementation of IPE placements.

Keywords

Interprofessional education, Collaborative learning, Experiential learning, Development, Implementation, Rehabilitation therapy, Students, Clinical instructors

Summary for Lay Audience

Interprofessional education (IPE) placements provide students from different healthcare disciplines with practical opportunities to learn and work together to prepare them to deliver collaborative care to patients. Rehabilitation therapy professionals are expected to practice efficiently and effectively in collaborative teams upon entry-to-practice, but typically have little exposure to other rehabilitation professionals during their training. This means these professionals stand to benefit a lot from IPE experiential learning opportunities, such as placements, during their training. Studies have been conducted to explore what learners found beneficial about a particular IPE learning opportunity, but little is known on what learners find beneficial in the development and implementation of these IPE opportunities. In an attempt to fill this gap, this study explored what strategies rehabilitation therapy students, as well as clinical preceptors and faculty members with past IPE experience find valuable to interprofessional learning.

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Chapter 1

1 Introduction and Background

“Interprofessional education... is an opportunity to not only change the way that we think about educating future health workers, but is an opportunity to step back and reconsider the traditional means of health-care delivery. I think that what we’re talking about is not just a change in educational practices, but a change in the culture of medicine and health-care” – Student leader (World Health Organization WHO, 2010, p. 6).

Interprofessional education (IPE) strives to promote a collaborative learning environment by bringing together students from two or more health professions to ‘learn about, from, and with each other’ (WHO, 2010). It is vital that all three prepositions be present in interprofessional learning, i.e., it is insufficient to merely bring students from multiple health professions together to learn in the same environment without any reflective interaction among the students (Buring et al., 2009; Thistlethwaite, 2012). IPE initiatives provide opportunities for students to demonstrate and improve the knowledge, skills, and competencies valuable in navigating real-life clinical scenarios with a collaborative and interprofessional approach (Alzamil & Meo, 2020; Brock et al., 2013; Imafuku et al., 2018). IPE has also been shown to enlighten students on the expertise and scope of other healthcare professionals (Courtenay, 2013; Hall et al., 2011; Mahler et al., 2018), as well as break down professional hierarchies which can act as barriers in interdisciplinary working environment (Arvin et al., 2017; Carlisle et al., 2004).

With the continuous emergence of diseases, as well as the increasing advancement in healthcare access, technology, delivery, and outcomes, it is apparent that delivering the best possible care goes beyond the scope of a single health profession and necessitates an effective collaborative interdisciplinary approach (Barr & Low, 2013; Freeth, 2001; Illingworth & Chelvanayagam, 2017; Oandasan & Reeves, 2005). Better clinical outcomes have been linked to collaborative care provided by a coordinated healthcare team (Brandt et al., 2014); however, challenges persist with regard to communication and

teamwork among healthcare professionals (Lestari et al., 2016). Furthermore, the patient-safety literature demonstrates that improving collaboration and communication among healthcare professionals can lead to a significant reduction in medical errors with a positive impact on shared decision-making (Sargeant, 2009; Darlow et al., 2015). Interprofessional education and practice have also been acknowledged as crucial to addressing the global health workforce crisis (WHO, 2010). The increased focus on the integration of IPE for students in healthcare professions, especially during their training has resulted from a growing awareness of this need for increased collaboration. It has been advised that IPE learning opportunities be provided to students during their academic and clinical training to prepare them for the reality of clinical practice (O’Leary et al., 2021). This early integration of IPE in their training could also improve students’ buy-in, possibly making them advocates for effective collaborative working environments.

1.1 Origins of IPE

The WHO’s Alma Ata Declaration, published in 1978, served as the impetus for IPE initiatives by emphasizing the need for a more collaborative approach to delivering healthcare (Mandy et al., 2004). This was reinforced by another WHO seminal report titled *Learning Together to Work Together* (World Health Organization, 1988). This report advocated for the use of shared learning to support students’ profession-specific training, emphasizing the need for students to learn together to develop skills necessary for tackling complex issues affecting individuals and communities. More recently, WHO created a *Framework for Action on Interprofessional Education and Collaborative Practice* (WHO, 2010), which provided substantial evidence showing the positive influence of effective IPE on collaborative practice (Illingworth & Chelvanayagam, 2017).

An international environmental scan was commissioned by WHO to answer questions regarding “where”, “how”, and “why” IPE was being offered across the world (Rodger et al., 2010). The investigators distributed internet-based surveys to academic and clinical instructors in different healthcare professions across the 193 WHO member states. A total of 396 surveys from 41 member countries were included, and only 15% of the survey

respondents had no prior experience facilitating IPE programs. The results of the scan revealed that the bulk (91%) of the respondents were from developed countries with high-income economies – Canada, United Kingdom and United States of America, while a few responses originated from developing countries with middle- and low-income economies – South Asia, sub-Saharan Africa, China, Middle East, Mexico, Poland, and South Africa. Rodger et al. (2010) noted that a range of health professions were involved in IPE delivery, with nursing, midwifery, physiotherapy, occupational therapy, speech pathology, audiology, medicine, and social work having the most representation. The greater number of IPE programs available to these health professions was speculatively linked to more of these professionals in the health workforce (Rodger et al., 2010). It was also noted that despite research indicating clinical or practice placements to be optimal to students' IPE experiences, respondents in this environmental scan did not frequently provide these types of IPE experiences. Unfortunately, there was no further explanation provided regarding this discovery.

More recently, another group of researchers corroborated the findings of Rodger et al., (2010) by conducting a systematic review of IPE in global health care. The results of that study revealed IPE programs were more widely established in Canada, the United States of America, the United Kingdom, Australia, and European nations (Herath et al., 2017). The findings of this review also revealed IPE placements were not delivered in a consistent manner and stressed that improving the curricula component of IPE placements based on the micro (individual) and macro (organizational) levels of practice should be an essential part of professional education and training (Herath et al., 2017).

At the national level, Canada became a global leader in the development of IPE and practice programs in the early 2000s (Schmitt et al., 2013). Over \$35 million was committed by Health Canada towards new IPE and practice programs, supporting curricular reforms aimed at integrating IPE across various health fields (Schmitt et al., 2013). Further, the Canadian Interprofessional Health Collaborative (CIHC) was established in 2007 to promote health and education collaboration, as well as serve as Canada's national hub for resources and networking related to IPE in healthcare practice (WHO, 2010).

1.2 Theoretical Framework

The framework for action on interprofessional education and collaborative practice (WHO, 2010) posits a number of action items and recommendations for health policymakers to consider when providing learning opportunities for IPE and collaborative practice. These recommendations or mechanisms as termed in the WHO report are grouped into three sections (Figure 1):

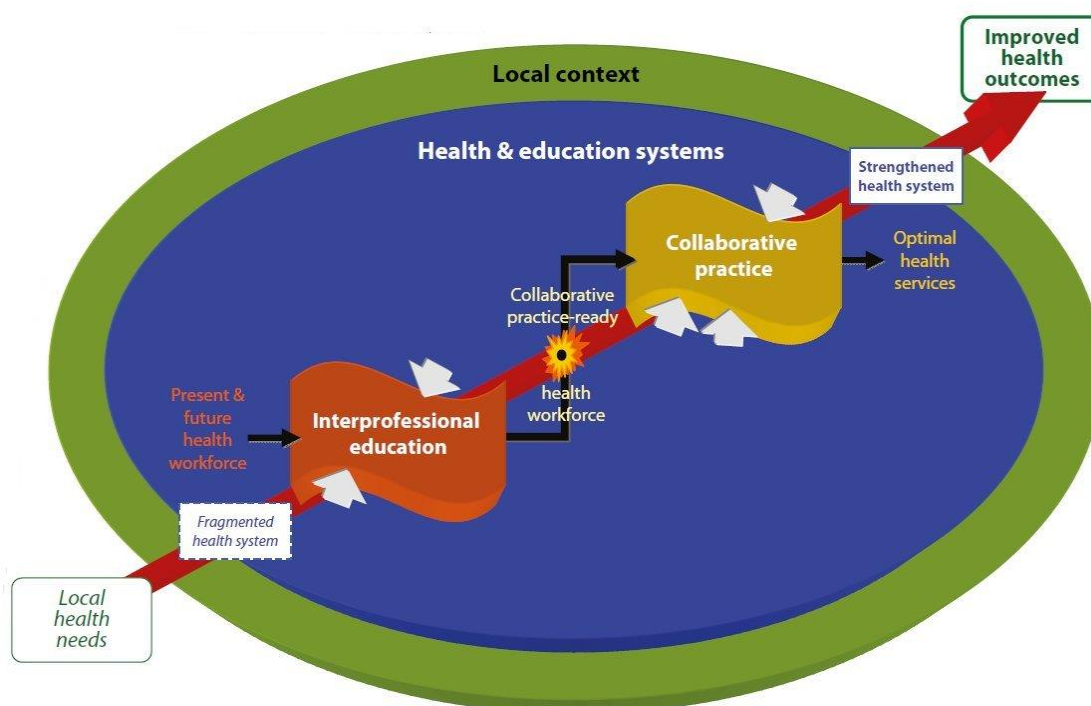


Figure 1: Health and education systems (WHO, 2010)

1. **Interprofessional education** – “occurs when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010, p. 13). The mechanisms within this section are further grouped into educator and curricular mechanisms. Educator mechanisms relate to the staff members responsible for developing and implementing IPE programs, e.g., “institutional support”, “staff training”, and “champions” (WHO, 2010, p. 23). Curricular mechanisms relate to the contents of the IPE programs delivered, e.g., “assessment”, “learning methods”, and “logistics and scheduling”

(WHO, 2010, p. 23). These mechanisms will be most beneficial in contextualizing the results from this study as they focus on developing and implementing IPE programs, which align with the purpose of this study. These mechanisms will not be used to deduce themes or subthemes from the findings of this study but rather will be used to give some additional context to the results.

2. **Collaborative practice** – “*occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers, and communities to deliver the highest quality of care across settings*” (WHO, 2010, p. 13). Mechanisms within this section relate to factors that influence effective collaborative practice within different clinical settings.
3. **Health and education systems** – “*consist of all the organizations, people and actions whose primary intent is to promote, restore or maintain health and facilitate learning, respectively*” (WHO, 2010, p. 13). This section relates to improving IPE and collaborative practice at a larger scale, identifying factors relating to funding, patient safety, and more.

1.3 Development, Implementation, and Evaluation

Coordinated efforts and thorough planning are required for successful IPE implementation in order to promote the best learning opportunities (Boet et al., 2014). However, some institutional barriers such as time constraints, limited space, delivery methods, lack of funding, and student and/or faculty buy-in can hinder the successful development and implementation of IPE programs (Alshogran et al., 2022; Behrend et al., 2019; Neocleous, 2014; Neville et al., 2013). While interaction among different disciplines has been notably higher through the implementation of recent IPE projects (Herath et al., 2017), there is still variability regarding methods of IPE development and implementation (Carlisle et al., 2004). IPE opportunities can vary in length, type of experience, and mode of delivery; examples include one-day events, full courses, face-to-face interactions, use of online modules, community-based projects, simulation activities, and/or case study discussions to name a few (Margalit et al., 2009; Thistlethwaite, 2015). There are also discrepancies regarding when IPE should take place, what health

professions should be included, and how to improve participants' engagement (Abu-Rish et al., 2012).

Another irregularity can be observed in the outcome measures for evaluation used in studies assessing the impact of IPE. In 2016, the Interprofessional Education Collaborative (IPEC) re-established four core competencies to define interprofessional collaboration (Interprofessional Education Collaborative, 2016a). These competencies include 1) value/ethics for interprofessional practice 2) roles/responsibilities, 3) interprofessional communication, and 4) teams and teamwork. To evaluate how successful an IPE initiative is at addressing these competencies, interprofessional competency outcome measures are required (Lucas Molitor & Naber, 2020), however, the evaluation approaches for IPE remain highly variable.

A systematic review identified 36 different assessment tools used in the evaluation of IPE (Shrader et al., 2017). Some tools identified by this review include - Team Skills Scale (TSS; Hepburn et al., 2002), Interprofessional Socialization and Valuing Scale (ISVS-9; King et al., 2016), and the Attitudes Towards Health Care Teams Scale (ATHCTS; Heinemann et al., 1999). Additionally, tools like the Readiness for Interprofessional Learning Scale (RIPLS; Parsell & Bligh, 1999) and the Interdisciplinary Education Perception Scale (IEPS; Luecht et al., 1990) were also used by a number of studies (Giordano et al., 2012; Goelen et al., 2006; Holthaus et al., 2015; Swinnen et al., 2021) to evaluate the impact of IPE for different health professions. These are just a few of the different outcome measures being used to evaluate IPE impact. Despite the fact many of these outcome measures are based on the core competencies, the variations present challenges in making direct comparisons across them. These variations observed in the implementation of IPE initiatives reveal that efforts are still required to ensure that IPE is developed, implemented, and assessed in a manner that provides learners with appropriate IPE opportunities to better prepare them to serve and support their different healthcare systems.

1.4 Impact of IPE

The impact of IPE has resulted in positive outcomes both for healthcare professionals and students. IPE has been linked to improved intra-professional communication, as well as communication between clinicians of various professions, by increasing mutual understanding and respect for other disciplines (Robben et al., 2012; Sinclair, 2004). In the study by Robben et al. (2012), an IPE program was created and delivered to primary care professionals – general practitioners, pharmacists, nurses, physical therapists, occupational therapists, dietitians, and social workers working with frail elderly patients. This program consisted of three interactive interprofessional workshops lasting approximately 3 hours each and was aimed at educating participants on delivering collaborative care to the frail elderly. With the use of outcome measures such as the ATHCTS, TSS, and the interprofessional attitudes questionnaire, as well as semi-structured interviews, the authors found an improvement in the participants' attitudes towards the other professionals, as well as improved team skills (Robben et al., 2012). Participants also noted that the IPE program benefited them in advancing their understanding of the other professionals' areas of expertise (Robben et al., 2012).

At the educational level, the impact of IPE on students' interprofessional learning has been assessed both quantitatively and qualitatively (Courtenay, 2013; Darlow et al., 2015; Holthaus et al., 2015; Mahler et al., 2018; Swinnen et al., 2021). Students have found their varying interprofessional learning experiences beneficial in furthering their understanding of individual professional roles.

The study by Swinnen et al., (2021) incorporated a randomized controlled trial (RCT) using an adapted IEPS scale to evaluate the impact of an IPE session on students' attitudes toward interprofessional collaboration. Ten discipline-specific (control) groups and ten interprofessional (intervention) groups of students were asked to create interdisciplinary treatment plans for patients with breast cancer. The results of the IEPS scale revealed students in the intervention group scored higher than the control group on two of the four subscales – “perception of competence own profession” and “perception of actual cooperation”. This correlates with the findings of Darlow et al., (2015) which indicated that their intervention groups' attitudes regarding interprofessional teams and

interprofessional learning significantly improved after participating in an eleven-hour IPE program on the management of long-term conditions. Additionally, the intervention group students' self-reported effectiveness as team members and their self-perceived knowledge, confidence, and capacity to manage long-term conditions were also significantly improved (Darlow et al., 2015).

Themes relating to improved communication and professional competency, as well as a better understanding of other professions' roles have been qualitatively identified by students in healthcare programs as some of the benefits of participating in IPE initiatives (Courtenay, 2013; Holthaus et al., 2015; Mahler et al., 2018). However, some of these studies also revealed challenges about disparities in professional jargon, medical knowledge, and equality among professions (Courtenay, 2013; Mahler et al., 2018). This demonstrates that while students find IPE to be beneficial, more focus is still required in the development and implementation of IPE opportunities to address these challenges to their interprofessional learning.

1.5 IPE in Practical Experiences

Practical workplace experiences such as clinical placements, fieldwork, or internships play a crucial role in improving students' clinical competencies (Rodger et al., 2008), therefore, interprofessional practical experiences can provide additional and unique opportunities for students to develop interprofessional competencies (Fougner & Horntvedt, 2011). While there are different terms used to describe practical workplace experience, for the purpose of this thesis, they will be collectively referred to as placements. IPE placements are team-based interprofessional practice placements, which according to Brewer and Barr (2016) can be defined as “*a dedicated and prearranged opportunity for a number of participants from health, social care and related professions to learn together for a period of time in the same setting as they perform typical activities of their profession as a team focused on a client-centered approach*” (p. 747). IPE placements have been shown to improve role stereotyping, conflict resolution, cooperation among different professions, and patient outcomes in different contexts (Jones & Jones, 2011; Pitout et al., 2016).

The structure of an IPE placement can be somewhat different from that of a profession-specific placement, as it is important to provide opportunities for collaborative thinking and problem-solving when developing an IPE placement (Fairchild et al., 2012). A few other features to consider when developing an IPE placement include resources, learning activities, duration of the placement, and supervision (Boshoff et al., 2020). For the purpose of this study, the focus will be on strategies regarding the learning activities and supervision of an IPE placement.

Learning activities play a vital role in students' interprofessional learning as it is the aspect of an IPE placement that provides opportunities to collaborate with each other. The literature reveals a number of different learning activities being used in IPE placements, such as working directly with clients, case presentations, group discussion, reflection, and/or shadowing a supervisor in another discipline (Chipchase et al., 2012; Holmqvist et al., 2012; Opina-Tan, 2013). Supervision in a placement opportunity provides students with personalized guidance on their clinical work; however, in an IPE placement, students will require more than just their profession-specific supervision. It is expected that a supervisor in an IPE placement will also integrate strategies relating to team formation, conflict resolution, team effectiveness, and group dynamics (Chipchase et al., 2012), providing students the opportunity to improve both their interprofessional and profession-specific learning. Some IPE placements have been noted to provide group supervision from multiple or rotating supervisors, while some also provided personalized supervision from profession-specific supervisors to support the group supervision (Boshoff et al., 2020). While these varying strategies have noted positive outcomes regarding students' interprofessional development, little is known about which of these strategies has the most impact on students' interprofessional learning, and therefore which strategies should be required for the development of any IPE placement.

1.6 Student and Faculty Inclusion

It is best practice for students to have input in how their education is delivered (Zimmerman, 2002); however, it could be argued that students are rarely involved in the development, implementation, or assessment of educational offerings such as IPE placements. The involvement of students in the development of IPE programs has been

strongly encouraged as it improves students' willingness to collaborate and ensures the sustainability of these programs (Hoffman, Rosenfield, et al., 2008). A study by Rosenfield et al., (2011) explored students' impressions of a large-scale IPE seminar. The results of this study revealed students had some negative opinions regarding the size of the event and the inadequate realism of the interprofessional scenarios used. These challenges highlighted by the students indicate the need for smaller and more practical IPE learning opportunities, such as IPE placements. Students involved in the development of IPE courses demonstrated significant professional improvement (Behrend et al., 2019), and the faculty members involved in the study recognized that these students may go on to "*become future change agents and even ambassadors to improve interprofessional collaboration in the workplace*" (p. 1370).

The perceptions of the clinical instructors regarding the development and implementation of IPE programs have also been sparsely explored. For the purpose of this study, clinical instructors will refer to both academic and clinical instructors; this is done to make it more comprehensible and also because both groups share a common goal of preparing students for clinical practice. Clinical instructors play crucial roles in students' interprofessional learning, as they are responsible for imparting and supporting the core principles of IPE (Cimino et al., 2022). It could be argued that the implementation of IPE programs can be significantly influenced by the positive or negative support from the clinical instructors (Schwarz, 2017). A few factors have been identified by clinical instructors as barriers to their support for IPE. These include attitudinal barriers, support from the administration, inadequate IPE knowledge, and a lack of confidence in teaching techniques and conflict management skills (Curran et al., 2005; Hinderer et al., 2016). Attitudinal barriers relate to the attitudes of clinical instructors regarding IPE. A study by Hinderer et al. (2016) revealed a correlation between years of clinical practice experience and negative perceptions regarding IPE in clinical instructors. These negative perceptions were linked to a "historically isolated academic practice" (Hinderer et al., 2016, p. e4). Structural and organizational factors such as schedule/timetable conflicts, territorial disputes, isolated curriculums and a lack of perceived value have been identified as some factors that act as barriers to faculty members supporting IPE programs (Curran et al., 2005). An instructor's level of IPE knowledge and confidence in IPE teaching could be

another barrier related to the limited availability of IPE placements. Professional development and continuing education opportunities for these instructors are lacking and many of these instructors had no experience with IPE during their training (Hinderer et al., 2016).

1.7 Purpose

Across various healthcare disciplines, IPE is a required component by organizations that accredit educational programs (WHO, 2010). In the rehabilitation health disciplines such as physical therapy, occupational therapy, speech-language pathology, and audiology, professionals are expected to work efficiently and effectively in interprofessional teams upon entry-to-practice when providing care across clinical settings, (Felsher & Ross, 1994; Hanna et al., 2007). This emphasizes the need to create IPE opportunities that require teamwork and collaboration, as well as the development of profession-specific and interprofessional competencies during clinical training for these disciplines (Harder, 2021). The focus on these four rehabilitation therapy programs was also driven by availability and feasibility. The programs represent the clinical graduate rehabilitation therapy programs at Western University, where this study was conducted, and these programs also focus on preparing students for entry-to-practice, thereby providing a convenient and accessible population of participants for this study. Factors such as the available resources, time constraints, and the scope of the project also influenced the limitation of the scope of this study to these four programs, allowing the researcher to achieve a comprehensive understanding of the research question while maintaining a feasible and manageable workload. The co-creation of IPE offerings with learners and educators has the potential to maximize the educational impact and successful implementation of IPE (Sargeant, 2009; Tamura et al., 2012). Given this, the purpose of this study is to identify learning activities and strategies for supervision that are considered valuable to rehabilitation therapy students and clinical instructors in the development and implementation of IPE placements. It will explore students' and clinical instructors' reflections on previous IPE experiences and pinpoint key learning activities and strategies that are perceived to be beneficial to interprofessional learning within a placement opportunity.

Chapter 2

2 Study design

This research was structured as a qualitative descriptive study. The underlying philosophy of qualitative description is based on naturalistic inquiry and has been identified as beneficial in addressing research questions aimed at discovering the who, what, and where of events or experiences (Sandelowski, 2000). Qualitative descriptive design allows the researcher to obtain direct and unembellished responses regarding a particular interest of the researcher or information needed to develop or refine interventions or questionnaires (Neergaard et al., 2009; Sandelowski, 2000, 2010; Sullivan-Bolyai et al., 2005). In a qualitative descriptive study, the research question is open-ended with emphasis on gathering comprehensive, in-depth data using techniques including focus groups, interviews, and written responses (Denzin & Lincoln, 2011). The information gathered for a qualitative descriptive study is often expressed in words rather than numbers, and it is then examined to find patterns and themes using qualitative techniques like thematic analysis (Patton, 2015).

2.1 Eligibility criteria

Eligible participants included second-year clinical graduate students registered in any of the rehabilitation sciences clinical programs (audiology, occupational therapy, physical therapy, and speech-language pathology) at Western university. Second-year students were selected to participate in this study because the academic curriculum of all four above-mentioned rehabilitation sciences disciplines at Western university requires IPE in the first year of their clinical graduate program. In order to be eligible for this study, students were required to have at least one previous IPE experience, such as courses, seminars, or practical experience. This exposure to IPE during their first year was important for participants in this study to draw upon when identifying valuable strategies for the development and implementation of IPE placements. Clinical instructors (clinical preceptors and academic instructors) of the rehabilitation sciences programs were also recruited for this study. Clinical instructors were required to have at least two years of

interprofessional working experience, such as developing IPE programs for students or working in interprofessional teams. A minimum of two years of interprofessional working experience for the clinical instructors was selected to allow for richer descriptions of valuable strategies backed up by substantial interprofessional experience. First-year students, and second-year students without IPE experience or clinical instructors with less than two years interprofessional working experience were not included in this study.

2.2 Ethical considerations

This study was approved by the Western Research ethics board (Appendix A). Participation was voluntary, and participants were informed at every step of the data collection process that they could refuse to answer any questions or withdraw completely from the study at any time. Students were assured that their comments would have no impact whatsoever on their academic standing, placement opportunities, or performance in any program elements.

Participants were made aware of the possibility of a privacy breach when information is stored electronically but were assured that all precautions were taken by the researchers to reduce this risk. Participants were also informed that the nature of focus groups prevented the researcher from assuring complete confidentiality, so participants were advised to respect the privacy of other participants and not repeat what was discussed in the focus groups. There were no known disruptions to the participants' daily activities as data collection was completed remotely and no in-person interactions were necessary. Each interview and focus group were held at a date and time that worked for all participants.

Upon approval from the Western Research Ethics Board, recruitment began in May 2022 and ceased at the end of December 2022, this timeline for recruitment was to limit a potential conflict of interest. The principal investigator of this study was due to begin instructing a course for some of the second-year clinical rehabilitation sciences students at the start of January 2023. This posed a potential conflict as students could feel pressured to participate in the study to the benefit of the principal investigator. In order to

address this possible power imbalance between the principal investigator and students, it was considered best to stop recruitment before the start of January 2023.

Another potential conflict of interest that occurred during the recruitment phase was the researcher holding a teaching assistant position for two courses involving the second-year physical therapy and occupational therapy students. While the researcher had no influence on the grades of the physical therapy students, the researcher was involved in grading and providing feedback to the occupational therapy students. However, grades and feedback provided by the researcher were subject to review and final edits by the course instructor, and students were advised to seek a regrade if they felt unsatisfied with their grades. This conflict of interest was also addressed by having another member of the research team conduct the recruitment and consent process for the second-year physical therapy and occupational therapy students, and reassuring students that their participation and comments in this study would have no impact on their academic standing and placement opportunities.

2.3 Recruitment

Convenience sampling was used in this study, which allows the researcher to recruit participants that fit the study's eligibility criteria (Etikan, 2016). Mass recruitment emails were sent to the second-year clinical graduate students and clinical instructors in all four rehabilitation sciences clinical programs at Western University. Emails contained an overview of the study, eligibility criteria, and directions for individuals interested in participating in the study. In-person recruitment was also conducted for students in their various classes, study protocols, and eligibility criteria were discussed, and the researcher's contact was made available for interested participants. Letter of information and consent forms were sent to interested participants for their review via an email link to a shared Western OneDrive folder, where this form could be downloaded, signed, and dated confirming their consent to participate in the study.

2.4 Data collection

Two demographic Qualtrics surveys were designed, one for each of the participant groups (students and clinical instructors; Appendix B). Once consent was received, participants were sent their study ID, the appropriate demographic survey link, a scheduled Zoom interview link, as well as a copy of the interview guide. To protect the identity of the participants, a study ID containing four numerical characters was created for each participant. The study IDs went in a consecutive manner starting from 1001 for the students, while the study ID for the clinical instructors began from 2001.

Interviews were one of the data collection methods used in this study. Interviews are conducted when one wishes to learn more about another individual's perspective on an event, person, idea, or item (Nunokoosing, 2005). Interviews allow participants to express themselves, explore the ways in which people working together share common understandings, gain insight into specific experiences, learn about the motivations behind decisions, observe informal procedures, consider apparent inconsistencies between attitudes and behavior, and give participants time to respond (Hannabuss, 1996).

Specifically, a semi-structured interview is a type of interview typically constructed around a set of predefined open-ended questions, with additional questions arising from the interviewer and interviewee's conversation (DiCicco-Bloom & Crabtree, 2006). Semi-structured interviews with the students and clinical instructors were conducted via the Western Corporate Zoom platform. Interviews were audio recorded and lasted between 30 to 60 minutes. Two interview guides were created and reviewed with the help of the research advisory committee – one for the students and another for the clinical instructors (Appendix C). Interview questions were open-ended and allowed participants to discuss in depth their previous IPE experiences as well as strategies that would be valuable to the development and implementation of IPE placements. Interviews were conducted from July 6th, 2022 till November 18th, 2022.

Another data collection method used in this study was focus groups. A focus group is a gathering of people who meet informally to discuss a certain topic chosen by the researcher (Kitzinger, 1994; Morgan, 1998). This discussion is monitored, guided, and recorded by the researcher, often called a moderator or facilitator. Focus groups are used

to gather information on shared opinions and the meanings that underpin such opinions (Kitzinger, 1994; Morgan, 1998). After all the interviews were completed, one focus group, lasting approximately two hours was conducted with all participants via the Western Corporate Zoom platform to collectively discuss the findings of the interviews. A focus group guide was also designed with the help of the advisory committee (Appendix D). The focus group discussion took place on December 12th, 2022.

Focus groups and interviews are two frequently employed qualitative research techniques that entail acquiring information through discussion with individuals or small groups. They can offer insightful observations and rich, in-depth details on people's experiences, viewpoints, and perceptions regarding a given subject (Lincoln & Guba, 1985). An in-depth and nuanced grasp of the subject under investigation can be obtained by conducting both focus groups and interviews as part of a research study (Krueger & Casey, 2015). While interviews give researchers the ability to elicit detailed information from participants in a one-on-one situation, focus groups can offer the chance to see how ideas and attitudes diverge or converge within a group environment; this was beneficial in observing the similarities and differences among the perceptions of the two participant groups. The use of focus groups in this study was also beneficial in generating debate and conversation among the participants, which resulted in a more dynamic and engaging data collection process (Krueger & Casey, 2015). The combination of interviews and focus group in this study allowed the researcher to gain a more comprehensive understanding of valuable strategies to consider in the development and implementation of IPE placements. This helped to increase the confidence that the researcher has in the conclusions drawn from the study.

According to Tracy (2010), the criterion of "rich rigor" suggests that researchers should use appropriate and rigorous research methods to ensure the validity and reliability of their findings. The use of focus groups and interviews in this study improved the rigor by providing the researcher access to multiple data sources and enabling triangulation of the results. Additionally, the criterion of "credibility" suggests that researchers should use methods that are appropriate and that ensure the credibility of the researcher (Tracy, 2010). By conducting both focus groups and interviews the researcher was able to

increase the credibility of the study by providing a more comprehensive and nuanced understanding of the topic being investigated. The researcher was able to better comprehend the complexity and nuances of the topic under study by compiling data from both individual and group discussions (Tracy, 2010).

2.5 Data Analysis

Interviews were transcribed verbatim using the Western Corporate Zoom's live transcription function and transcripts were then reviewed, corrected, and analyzed by the researcher after each interview was completed. In an iterative process, the interview transcripts were read multiple times to develop familiarity with the data. Using NVivo 12 software, line-by-line coding was used to inductively generate relevant codes relating to strategies for an IPE placement. An inductive thematic approach (Braun & Clarke, 2006) was then used to identify, analyze, and group identified codes into themes and sub-themes. This approach was used to understand participants' previous IPE experiences and identify beneficial strategies for IPE placements without any prior assumptions, by focusing on patterns of meaning across the data, grouping new meanings, and identifying emergent themes (Braun & Clarke, 2021).

The identified strategies were then incorporated into the focus group guide document and presented during the focus group. The focus group was transcribed verbatim using the Western Corporate Zoom's live transcription and the transcript was reviewed, corrected, and analyzed by the researcher at the end of the meeting. Similar to the analysis of the interviews, NVivo 12 software was used to analyze the focus group transcript. Line-by-line coding was conducted and identified codes were grouped into themes and sub-themes relating to strategies for an IPE placement.

The strategies identified from the interview data were what was discussed in the focus group; therefore, it was observed that comparable themes were generated from both data collection methods, with the exception of a few new themes emerging from the focus group data. For this reason, the final themes and subthemes are derived from both interviews and the focus group and are presented together in the next chapter.

Chapter 3

3 Results

A total of eight participants – four students and four clinical instructors – consented to participate in this study. This chapter will present the findings of this study in two parts. The first part presents the characteristics of the participants collected from the demographic surveys. The second part will present the themes and subthemes derived from both interviews and focus groups, with accompanying quotes from participants.

3.1 Description of Participants

3.1.1 Characteristics of students

Four students consented to participate in this study. All students identified as female, with a mean age of 25.3 years old. The majority of the students were currently registered in the speech-language pathology program. While all the students had similar IPE experiences from IPE courses provided to them over the course of their current graduate programs, it was also observed that all students had no formal IPE education during their undergraduate training.

Table 1: Demographic information of student participants

Sex	
Female (n=4)	100%
Gender	
Female (n=4)	100%
Age	
21-25 (n=3)	75%

26-30 (n=1)	25%
Rehabilitation Program	
Physical Therapy (n=1)	25%
Speech Language Pathology (n=3)	75%
IPE experience	
IPE Courses	100%
Placements	25%

3.1.2 Characteristics of clinical instructors

Four clinical instructors consented to participate in this study. Three clinical instructors identified as female, and one identified as male. The mean age for this participant group was 50.8 years old. The occupational therapy discipline had the highest representation among the clinical instructors. Each clinical instructor had over 15 years of interprofessional working experience in varying settings, including both academic and clinical, as well as government agencies. All clinical instructors had interprofessional working experience in clinical settings such as government-funded hospitals and private clinics, and most also gained interprofessional working experiences from academic settings such as IPE placements or courses.

Table 2: Demographic information of clinical instructor participants

Sex	
Female (n=3)	75%
Male (n=1)	25%

Gender	
Female (n=3)	75%
Male (n=1)	25%
Age	
41-45 (n=1)	25%
46-50 (n=2)	50%
61-65 (n=1)	25%
Rehabilitation Program	
Occupational Therapy (n=3)	75%
Physical Therapy (n=1)	25%
Years of Interprofessional collaborative working experience	
11-20 (n=2)	50%
21-30 (n=1)	25%
31-40 (n=1)	25%
IPE Experience	
Clinical settings	100%
Academic settings	75%
Government agencies	25%

3.2 Presentation of Findings

All eight participants were interviewed individually, and six of those participants participated in the focus group. Upon the organization and analysis of the data collected from both interviews and focus groups, 4 main themes were identified – 1) Views on IPE placement 2) General structure of IPE placement, 3) Learning activities, and 4) Supervision. These themes were further divided into subthemes which are presented below (Figure 1). These themes and subthemes are presented with accompanying quotes below; quotes derived from interviews are labeled with the participant’s study ID and group, while the quotes from the focus groups are labeled with the participant group only.

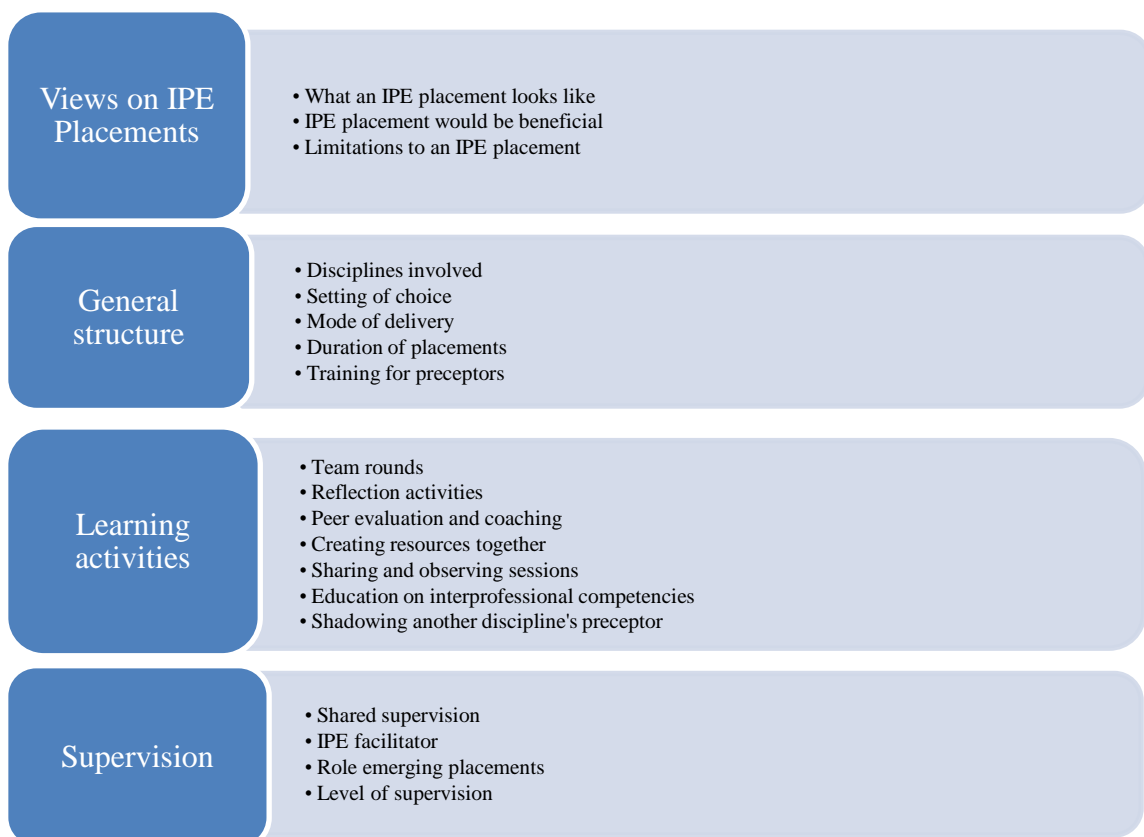


Figure 2: Themes and subthemes derived from interviews and focus group

3.2.1 Views on IPE placements

This theme contains 3 subthemes relating to the general opinions of the participants regarding an IPE placement.

What an IPE placement looks like

Participants were asked to describe collectively what they perceived an IPE placement opportunity might entail, and both participant groups presented similar ideas. One student described IPE placements as:

Creating [the] opportunity for students to see how the same goals are like worked on with other disciplines, and sometimes like sharing sessions and seeing how we can maximize the use of like all the rehab professionals without being overlapping or doing like the same thing twice, you know - Student (Focus group)

Another participant said:

So I think there's many ways that an interprofessional placement can play out, depending on various factors like how many students from various professions can be in one setting at a time. The more the better of course, but even when there's only two different professionals represented there's still opportunities for the students to collaborate together, learning about one another's roles observing one another in practice, doing assessments together, perhaps collaborating on a project together that would benefit the program that they're working in, and the clients that are in the program and so on – Clinical instructor (Focus group)

IPE placement would be beneficial

Students and clinical instructors both believed a placement opportunity would be beneficial to students' interprofessional development and they expressed their support for IPE placements as a good way to integrate IPE into students' training.

Depending on the profession and their [students] clinical education, at least one of their clinical placements, having a significant integration within the IPE would be crucial to their development - Participant 2004 Clinical instructor (Interview)

Oh, I think that [IPE placement] would be a good thing, it could be beneficial for teamwork – Participant 1001 Student (Interview)

Some students also mentioned how an IPE placement could provide peer support and practical experiences which would be beneficial to their professional and interprofessional development.

And for like working together, I think if there were two students on placement at the same location, that would actually be a really nice opportunity for us to like problem solve on our own because sometimes we don't always want to ask our preceptor or like ask for help, but sometimes it's good to talk things through with somebody. So it would be really nice to be able to talk something through with an audiology student or an OT student on placement. You know, I have this client, and I don't know what to do, what do you think? – Participant 1002 Student (Interview)

I absolutely think that it [IPE placement] would be [beneficial] because you're getting that practical real-world experience. I think that most placements externally that you're going to go to, it's a bit different in our in-house like [clinic]. But externally, I mean, it's kind of going to be hard to avoid working with other people because it's just what happens in our field. Just everybody works together because all the clients and patients are very complex. But I think that actually having an intentional IPE placement where like maybe that like yourself and an OT student are assigned to the same kind of placement site at the same time. And things happen where you're working together, and you get to talk about that. I think things like that would be very helpful, very difficult to coordinate. So like not the most practical thing, but something along those. In a perfect world would be great. – Participant 1004 Student (Interview)

Limitations to an IPE placement

While the participants expressed how they believed an IPE placement would be beneficial to students' training, some further discussed limitations that could influence the successful development and implementation of such a placement opportunity. One example is the choice of setting for the placement.

Another actual physical limitation is finding a place where we can all do placements together. I can't imagine that would be easy – Participant 1002 Student (Interview)

The support from the administration was another limitation identified.

Having created one [IPE placement] it takes tons and tons of work, and so to try and implement that or put that on to one or a few clinical preceptors is a pretty tall task without a significant amount of support. I think trying to create you know... if we've got 80 plus students in the physio departments and similar amount in the OT department, trying to create a placement specific, so that each one of them has a specific IPE Placement I think would be an extremely difficult task. In a perfect world, awesome great, but without a huge amount of support and logistics around it, it can be a very difficult task – Participant 2004 Clinical instructor (Interview)

It was also mentioned during the focus group discussion.

I think we're all here because we think its [IPE placement] beneficial, it's does the hospital administration, does the clinic administration. does the university think that IPE is important to their culture and well-being of their facility, and thus will they invest in them. – Clinical instructor (Focus group)

Some students felt an IPE placement could possibly limit their individual professional development:

I could also see it [IPE placement] being like a challenge that, like, each student would maybe get less exposure time, less one on one, less time to maybe develop

their like clinical skills if they're kind of sharing like patients with someone else. – Participant 1001 Student (Interview)

3.2.2 General structure

This theme contains 5 subthemes of general strategies to consider when developing and implementing an IPE placement.

Disciplines involved

The choice of disciplines to involve in an IPE placement was brought up by some participants, mostly students. One participant felt they could also benefit from learning about, from, and with disciplines outside of rehabilitation therapy.

Yeah, I think I just really want to highlight the importance of us working with other professions, not [just] rehab [but] getting interprofessional experience with nurses, teachers, mental health professionals, dieticians. I'm trying to think of other ones, ENTs, but I think that's kind of really like what's missing. That's kind of a gap in our interprofessional experience. - Participant 1002 Student (Interview)

Another student believed all four rehabilitation therapy programs do not need to not be involved in the same IPE placement opportunity.

I also don't think it needs to be like a full team of like, all these different types of practitioners, like doesn't necessarily have to start with like all four or five of the different [rehab] programs working together, like pairing them up, kind of doing like maybe groups of two first or groups of three instead of throwing people into working like in a placement environment with so many people. – Participant 1001 Student (Interview)

Setting of choice

The clinical setting for an IPE placement was also discussed by both participant groups. It was recommended that this setting needed to be intentional in cultivating goals relating to IPE.

So really creating a setting where there are structures in place to facilitate these goals communication, collaboration, etc. I think the processes and the structure need to be clear, so then students can understand and really optimize those goals of communication and collaboration. – Participant 2003 Clinical instructor (Interview)

Another participant mentioned:

I think just emphasizing like the need to like intentionally address and like bring awareness to and reflect on and talk about IPE in the placement setting. Because it's like I mean, I don't know, like maybe some places do it. I haven't had placements externally, so I don't know to what degree people might already do this. – Participant 1004 Student (Interview)

Mode of delivery

It was observed that clinical instructors and students had conflicting opinions regarding virtual methods such as Zoom, Teams, etc. as a mode of delivery for IPE. While clinical instructors believed these virtual methods could be beneficial in alleviating some limitations associated with developing IPE programs such as resources, the students felt their past IPE experiences delivered virtually were not beneficial to their interprofessional learning. One clinical instructor said:

I think that would be an easy way to integrate some of that interprofessional experience sharing in the placement. By just, you know, utilizing a virtual platform like MS teams or zoom or something. – Participant 2001 Clinical instructor (Interview)

While a student said:

In the past we've done [IPE] things online, which I think was actually a huge barrier because people are just hiding with their camera off and their mic off and it's not... there's was nothing collaborative about really any of my IPE experiences so far. – Participant 1002 Student (Interview)

Another student said:

I think it [IPE placement] needs to be an in person setting. – Participant 1001 Student (Interview)

Duration of placements

Some participants said IPE placements could be delivered in shorter durations, as opposed to the usual lengthy placements provided in the different rehabilitation therapy programs. One clinical instructor suggested shorter placements could be beneficial in addressing the scheduling conflict that could arise from organizing a placement opportunity involving more than one rehabilitation therapy program:

We here at the [research center] where I work really try and strive to not necessarily have full-on placements but trying to integrate across the different professions to help bring those students in for experiential learning. For you know short periods of time, and so I think the difficulty of getting 6 or 8 weeks together as two professions maybe could be mitigated by having more shorter opportunities or a regular type of multi-disciplinary clinic, or some kind of interaction that goes on where students can come in parachute in for, not super short but you know a distinct amount of time and then rotate through which not only helps the students, it's probably a nice community type of interaction to supply some needed support. – Participant 2004 Clinical instructor (Interview)

This idea of shorter-duration placements was also discussed as a group and the clinical instructors agreed this could be beneficial in providing more students with more interprofessional learning opportunities.

I think just given the seemingly at least from the physical realm, the emerging/lack of placements for everybody if we had that opportunity to even maybe switch an eight to a switcheroo in the eight weeks like the first half did four and the others did four, it could give the opportunity to expose more people to that experience. I think it would be beneficial for sure. – Clinical instructor (Focus group)

However, the clinical instructors also admitted to a possible risk from this strategy.

I don't know, I struggle with when they are too short because then I feel students just start to get a feel for the role and get some responsibilities and then they move on so I don't know, there's no right answer of course but I kind of liked the longer placements because they actually get to sort of sink their teeth into it and do a bit more than rather than observe more but that's just my thoughts. – Clinical instructor (Focus group)

The majority of the students felt that shorter placements may not be beneficial to their interprofessional learning but were open to the idea of shorter placements if they were delivered toward the end of their programs when they would be more confident in their clinical skills.

I think that's a good thought also to have it [shorter IPE placement] later because, as in our first placements we are just so fresh and we're like still getting the hang of everything and then to throw in all this other interdisciplinary stuff seems like I'm trying to figure out what SLP does like I don't know what I don't need to know what an OT does or a PT does so I think that's a good idea. – Student (Focus group)

Training for preceptors

One clinical instructor suggested that providing the preceptors at an IPE placement with some form of IPE training could better improve their skills, ultimately improving the training received by the students.

So one of the things that I used to do when I was working in [academic department] was to do clinic sessions with clinicians about how they can[...] so these are clinicians that are preceptors for student placements, and we did this workshop every year, and they came together for a whole day to basically to talk about clinical education and how to make it more collaborative for the students in the practice settings, and I would go through really practical tips with the clinicians about things that they can do that aren't very time consuming, aren't resource heavy, things like making sure that the students have an opportunity to get together on a weekly basis to do discuss a case together or to do an assessment together. – Participant 2002 Clinical instructor (Interview)

This strategy was also supported by the majority of the participants – both clinical instructors and students – during the focus group discussion; however, one student highlighted how enforcing training for these preceptors might act as a barrier to the receptivity of these preceptors participating in an IPE placement.

I just wonder if, like most of our preceptor should already be doing this to some degree and have a certain awareness, and but like tacking on something extra when we already asking so much of clinical preceptors, like an additional training might seem just like another barrier, potentially. – Student (Focus group)

3.2.3 Learning activities

This theme contains 7 learning activities that could be conducted in an IPE placement to promote interprofessional learning.

Team rounds

This learning activity was the strategy mentioned most often by both students and clinical instructors during the interviews and was also supported by all participants during the focus group discussion.

I think maybe even having like debriefs at the start of the day and at the end of the day, if we're not working together where we kind of spend an hour saying, okay,

what clients are you going to see today and what are you going to work on? And then at the end of the day, how did that go and what did you do? Just because that would be a really cool way to get real world experience without maybe participating, but still being able to discuss it – Participant 1002 Student (Interview)

Another participant said:

setting up things like team rounds for everyone to understand where's everybody at, how can we collaborate, how can we set team goals to really get this client where they need and want to be by the time they're discharged from the setting, and that also would help with both communication and collaboration. – Participant 2003 Clinical instructor (Interview)

However, during the focus group discussion, some participants highlighted a few limitations to consider when implementing this strategy. A clinical instructor mentioned the receptivity of the interprofessional team to students as one limitation:

But my experience with students involvement in team rounds and case conferences and so on, is that the value of that is very much based on the receptivity of the whole team to students in general, and to interprofessional student placements so if the team is really on board with the role of the student and the value of the student to the team, then it's much more likely to be a positive experience for the student and they're going to feel more comfortable in during rounds and case conferences to speak up and take risks and, you know, maybe make some mistakes and be able to get really good constructive feedback from the team, as opposed to you know some settings where students might be viewed as more of a pain in the butt than a value to the team so I think that that piece is really important. It's how the team feels in general about students and particularly bringing students in to work together collaboratively. – Clinical instructor (Focus group)

One student also mentioned time constraints as another possible limitation to this learning activity:

I don't really see any risks but I think like we're all well aware within our disciplines that time is our biggest enemy. And so figuring out how to do these things in the most time effective way for everybody I think is the most important consideration. I don't have a solution for that, but I think the most important thing. – Student (Focus group)

Reflection activities

During interviews, both participant groups proposed giving students the chance to reflect on their ongoing or cumulative experiences within an IPE placement could be a beneficial learning activity. One student said:

Like writing a reflection or something like we do in a lot of our placements. We write like reflective journals and submit them to our supervisors after we've run a session or something on like, you know, what we did, what we learned, that kind of stuff. And especially at the end of placement, we submit like what we learned sort of reflection assignment. And so maybe there's two reflection assignment for a placement. And one of them is like what I've learned about IPE, or like just giving someone the opportunity to really think about and reflect and be aware of the IPE that's definitely all around them because it has to exist. – Participant 1004 Student (Interview)

As a group, this idea was supported by both students and clinical instructors. One clinical instructor further suggested including structured questions to guide students through the reflective process:

From a student aspect who sometimes don't have a lot of experience in the whole self-reflection. We've all heard about it, but a lot of times, adding some pointed kind of questions or structure to help them. – Clinical instructor (Focus group)

Some students also talked about the method of reflecting, stating reflective journaling could be too personal and maybe not the most beneficial method of reflecting within an IPE placement. The students agreed that reflecting as a group would be the most beneficial method of reflecting in an IPE placement.

I think journaling has its place, but I think it's much more personal. And so when we're thinking about working in this team, doing that sort of reflective practice collaboratively just naturally makes more sense. From my perspective. – Student (Focus group)

Peer evaluation and coaching

Clinical instructors stated students being involved in their evaluations could be a beneficial learning activity for an IPE placement. One instructor said:

I also think in the placement setting with the great facilitator, you could set up a really wonderful way for people to give constructive feedback to their peers right. None of us are perfect, we all can learn, so how do we help each other learn in a constructive way, and that is beneficial rather than causing conflicts. – Participant 2003 Clinical instructor (Interviews)

While this learning activity was suggested by only clinical instructors during the interviews, both participant groups agreed during the focus group discussion that it could be beneficial to students' interprofessional learning. Students, however, suggested that the feedback provided by their peers could be informal – i.e. having no effect on the students' grades – as this could allow for more honest feedback.

And I feel like if it's [feedback] more informal, it will be kind of like less high stakes on it and also just good because it's being provided to a peer so even though like it could be like a SLP providing feedback to an OT so different scopes at least they're both like students on a similar level. That could be less intimidating than giving feedback to a fully licensed SLP. – Student (Focus groups)

I think as students, when we have to grade each other we want to look out for each other and we don't want to throw anybody under the bus so we're like, amazing everything 90% [to] 100%, but I think we could definitely give feedback like without somebody hovering over us like a preceptor and listening, although feedback from you guys about how our feedback is would be useful just doing some like casual, not role play but just some practice. – Student (Focus group)

One clinical instructor further suggested peer coaching between older and younger students:

The opportunity for some peer coaching amongst students especially when there's more some more senior students together with some more junior students whether they are in the same profession or in different professions, there might be some opportunity for peer coaching that would relieve the clinical instructors and preceptors of some of that direct supervision. – Clinical instructor (Focus group)

Creating resources together

Another learning activity that clinical instructors identified during the interviews was students creating resources such as assessment forms or referral pathways in an IPE placement.

We could also co-create some initial assessment forms. So I know what information I'm going to obtain from my professional lens, what you're going to obtain from your professional lens, so the clients are not answering the same questions four times, but I know sort of where I need to focus my energies and knowing that my other teammates are going to cover the other areas. So having those forms perhaps created as guiding questions, or whatever the format might be, more structured or unstructured, but just at least guide the assessment process. – Participant 2003 Clinical instructor (Interview)

During the focus group discussion, this learning activity was collectively supported by all except one student who suggested that this learning activity might be most beneficial in the classroom setting as opposed to a placement opportunity.

I think it would be a useful and like really functional task for IPE courses, and not necessarily for placement, but just as an opportunity to brainstorm like what kind of things do you ask especially for screening and stuff, so that the patients aren't being asked over and over getting so many assessments right. – Student (Focus group)

Sharing and observing sessions

This learning activity was brought up by some students during the interviews. They felt they could benefit from observing or sharing treatment sessions with students from other disciplines in a placement opportunity. One student said:

In children's placements, OTs and SLPs do a lot of shared sessions where it's like one hour, but both clinicians are in the room working with the child. And sometimes when we're like a student and the OT is obviously a working professional, we take a back seat and we kind of lose our hour and the OT takes over and it ends up being an OT session. But I think if we were two students working together, like making a lesson plan, taking like, you know... however, I don't even know, like, how it works, like we write like, lesson plans and soap notes and things. I don't know if that they do that in PT and OT and stuff, but kind of really like running a whole session of, okay we have one hour, what are we going to work on and let's plan this together. – Participant 1002 Student (Interview)

However, during the focus group discussion, a larger number of participants were more receptive to the idea of sharing sessions – co-assessing and treating patients – with the other disciplines as a learning activity for an IPE placement, as opposed to just observing.

Like doing an assessment together. And, you know, is interesting because physio may ask about a person's home environment with a certain lens and then the OT might also ask additional questions about that home environment because we're thinking about home from different perspectives of doing an assessment together. We're not asking the same questions repeatedly, and we're asking them perhaps in

a little different way and gleaning different information for each profession. So, I like the idea of co-assessing. – Clinical instructor (Focus group)

I like the idea of sharing sessions with other disciplines because we do it all the time, especially with pediatric OT and speech, we share sessions. And then giving opportunities for students to interact outside of the clinic to plan and to prep and to figure that thing out is when like I think a lot of thinking and learning can happen. But in terms of observing, though it would be very fun and cool to watch, we don't have that much time to do that in general, so I don't see that being super, like, the best way to learn. – Student (Focus group)

I agree, in this day and age, if you're just watching things, we could usually accomplish that with some technology or some pre-video content. I think that's really starting to go the way of olden times with technology and our ability to capture things. – Clinical instructor (Focus group)

Education on interprofessional competencies

Some participants during the interviews indicated that giving students some structured training regarding the IPE competencies could benefit those students' interprofessional learning. Some specific IPE competencies discussed included teamwork and conflict resolution. One participant said:

Well, if there was an actual IPE placement, I think all of those [IPE] goals could be achieved. I think the students would need some education about how to manage conflict, for when it arises, so maybe some frameworks or strategies, or approaches like, oh we've got a problem, okay, step one, step two, step three, to really help them go through that conflict. – Participant 2003 Clinical instructor (Interview)

However, during the focus group discussion, the clinical instructors agreed this learning activity was best suited for the classroom, while the students voiced no opinions regarding this learning activity.

I don't see it happening formally on placement settings cos I don't think most clinicians will have the time to do formal teaching in the competencies, I think that's our role as educators at [our university] to offer that through our IPE courses and through the workshops that [instructor] does. That's where they're introduced to the competencies and hopefully have a chance to see them play out and in cases that they work on together and, and so on. I mean, the hope would be that those competencies will be familiar to the preceptors out there and the clinical instructors and that they would be modeling those competencies and encouraging the students to develop their skills and those areas. I don't see it happening, formally though. – Clinical instructor (Focus group)

I agree with [instructor] precisely I think that the... understand[ing] that those competencies exist for interprofessional education, needs to happen in school and then they get to see the application of the competencies in practice. – Clinical instructor (Focus group)

Shadowing another discipline's preceptor

Another strategy that emerged from the interviews involved having students shadow another discipline's preceptor in a placement setting.

And so I even just think in some senses a few more opportunities to even shadow some of these other disciplines would be helpful, just so. So say you're in a hospital placement and your clients are also receiving PT services like for me an SLP my clients also receiving PT services. It might be helpful to see what the PT is doing just so I have a better idea of like a full rounded rehab of what my client's doing. Obviously, I think working in a team in that IPE way is like the ultimate goal, and I think that would be amazing, but I think it might take like a little bit more stepping stones to get there, I guess. – Participant 1003 Student (Interview)

And some of the things that often happen anyways like, often students would shadow a member of another profession while they're on placement and encouraging that to happen, and maybe to take it a step further not just

shadowing just watching another clinician from another profession but perhaps doing something with that clinician collaboratively with a client, so an assessment for example, doing that together. – Participant 2002 Clinical instructor (Interview)

However, most participants collectively agreed during the focus group that this strategy was only beneficial if the disciplines involved in the IPE placement had overlapping roles.

I think it'd be interesting for students to actually put together, resources, wherever the setting would be on like okay what would my role be there as an OT as a physio whatever to share with the incoming group of students so then it comes from sort of that student perspective of what the other health professions would do. – Student (Focus group)

Some participants suggested taking a client-centered approach and instead following the client through the different treatment programs they are undergoing across the different disciplines.

And just to go back to something I had mentioned earlier like you so rather than just shadowing with clients that have no relationship to what I'm as a student doing and in my part of the placement, perhaps, following one of my clients through the various professions either you know what, as the other professions are assessing them or providing interventions because then it's something I can completely relate to and it benefits both me and the client for me to understand what services and assessments they're receiving from the other professions. – Clinical instructor (Focus group)

3.2.4 Supervision

This theme consists of 4 subthemes displaying how participants in this study believed supervision in an IPE placement should be addressed.

Shared supervision

This was the most discussed type of supervision by both participant groups from both interviews and the focus group. The majority of the participants noted that this type of supervision accompanied by discipline-specific supervision would be most beneficial in an IPE placement. Shared supervision refers to students in an IPE placement receiving supervision and feedback from preceptors from all different disciplines within that placement setting. One participant said:

Yeah, I do think, though... I don't think it needs to be a one-to-one model by any means. So you know I, as an OT perhaps I could supervise 3, 4 students, and like so let's say we had a clinic of 16 students, 4 OT, PT, SLP and audiology. I could see 1 OT, PT, SLP and audiology supervisor, so 4 supervisors for 16 students, let's say, and we could manage different things like, I will run team rounds every week. And then I could manage the whole team at certain levels, and then I could meet with my individual OT students to get to give them discipline specific feedback on their treatment plans, interventions, etc. – Participant 2003 Clinical instructor (Interview)

One participant mentioned some benefits of this type of supervision:

So, the benefits are that I think they would get a more fulsome view of what it's like to be a healthcare provider, and they learn about other disciplines, and I think we've probably talked a lot about the benefits. Another benefit actually is it limits the burden to preceptors. So, I know that preceptors would feel like I can't give a placement five days a week, because they would feel overwhelmed with that thought maybe they're really busy, maybe only work part time, but if you're sharing some students with another preceptor or profession, then you could really tag team and they might have them for three days and you have them for two that week and vice versa. So, I actually think that another benefit is sharing, it sounds bad to say, the burden of students, but yeah. – Participant 2001 Clinical instructor (Interviews)

While many participants felt that this type of supervision could be beneficial, certain limitations such as coordination, schedule conflicts, preceptor's comfort level, or

providing the right type of feedback to students from other disciplines could influence the implementation of this type of supervision.

Because there's different college requirements as to who needs to evaluate, how much evaluation needs to be done in order for the placement to count as field work hours. Could I supervise other students from other professions to some degree yes from a practice management perspective, but from a skills perspective, I can't tell an SLP student if they're doing right or wrong. So there are certain things I think we could cross supervise, but not everything, if that makes sense. – Participant 2003 Clinical instructor (Interview)

No, I don't like that [shared supervision] actually, because that's really how I felt, even in the IPE course because I don't know. I know there was other like SLP, but I... in every experience that I've had, a PT was supervising me or was my TA or was my like whatever. And I felt like it wasn't valuable to me at all because sometimes I would say things and try to contribute to the discussion. And I think they didn't see the thing through my lens from my profession, so they'd be like yeah okay, and it would kind of get dismissed or not appreciated. And then they would get all excited about, oh I'm going to give him a walker, you know? And that's like, okay. So I think it's not valuable for preceptors to be grading us or giving us feedback from another discipline. I think it should always be from our own discipline. – Participant 1002 Student (Interview)

IPE facilitator

The idea of including an IPE-specific facilitator was brought up by a few participants from both participant groups during the interviews as a beneficial supervision strategy for an IPE placement. It was suggested that this facilitator could handle all IPE-related training for the students, as well as coordinate schedules.

But I think that, if there tried to be like an interprofessional supervisor who supervised everybody, I think that that would be kind of crazy. I don't know. Like I mean, maybe if there was like everybody had their discipline-specific person, and

then maybe there was an IPE person that then you would go have conversations with who facilitated a discussion between the students. Like, what would you do in this case? What would you do in this case of a patient that you're all seeing? But I think there's a very big need still for obviously having discipline-specific supervisors, even if you're trying to encourage interprofessional education as well. – Participant 1004 Student (Interview)

While the clinical instructors had a lot to say about the inclusion of an IPE-specific coordinator in an IPE placement during the focus group discussion, the students voiced no opinions regarding this strategy. One clinical instructor with some experience developing previous IPE placements talked about how beneficial this strategy was in previous placement opportunities.

The other thing that we did is we encouraged each of our major settings, like especially you know the hospitals and larger agencies in London, to have the designated IPE person for placements. So it might be some facilities, I think the hospitals you know, they have a designated placement coordinator for the different health professions and it might be that person or might just be somebody who volunteers is really keen on interprofessional collaboration and that person would kind of coordinate the interprofessional aspect of the placements and would educate their peers about how to bring in interprofessional collaboration and communication into their placements with their students and would meet, like maybe weekly with all the students that are in the setting at that particular time. And, you know, go over cases with them and give them opportunities to do some learning together once a week, being facilitated by this coordinator. – Clinical instructor (Focus group)

Some other clinical instructors felt this strategy might not be necessary to the development and implementation of an IPE placement, further stating that this strategy could pose some difficulties to implement.

I don't know that a specific IPE person would be needed I would hope that all the supervisors, whoever the preceptors are in that setting would understand

interprofessional practice, and the pitfalls and the strength and the challenges and would be able to do that...I don't know that you need an extra person, because then that becomes a manpower issue as well, just my thoughts. – Clinical instructors (Focus group)

Role emerging placements

The idea of role emerging placements as an alternative supervision strategy was suggested during the focus group by a clinical instructor who had successfully used this strategy in previous single-discipline placements. A placement or fieldwork experience is known as role emerging when it provides students with opportunities to build new roles or practices that have not yet been established or acknowledged in conventional healthcare or social care settings (Clarke et al., 2014).

But mind you know there's lots of different models like the role emerging placement, I don't [know] is that familiar to SLP and PT as well? Role emerging or is that just an OT thing, I don't know. But, but, for example, I'm preceptor to six students coming up in January at the [placement opportunity] here in London, which is a homeless shelter, along with another OT colleague. And we don't work there, so it's role emerging in that there's no OT on site. So they're actually they're being supervised by a non-regulated person on site who they report to on a daily basis who works with them, and it's really effective beautiful model with so many benefits and then, and then my colleague and I go in once a week and meet with the students for two or three hours to go over their specific OT competencies and that they need to build on throughout the placement. – Clinical instructor (Focus group)

The same clinical instructor further said:

I highly recommend it. It's just the best I've been doing that for years and the students benefit so much and of course so to the clients who otherwise would not have exposure to the OT students or to occupational therapy at all, so big, to other professions that will be awesome. – Clinical instructor (Focus group)

Shortly after this strategy was brought up, some other participants showed their support for this strategy. One student said:

I mean even just say that like I'm happy you shared that I don't really have thoughts to add on but this is, that's not something I knew anything about so I think that's really cool. – Student (Focus group)

Level of supervision

Findings from the interviews and the focus group revealed that both students and clinical instructors believed that allowing students to make more decisions regarding their clients' assessment and treatment could be beneficial to their interprofessional learning.

I think it depends on the IPE placement obviously. I think as long as safety and risk management is always kind of at the topmost thought, that as much interaction hands-on decision making that the students are allowed again with the safe[ty] and then within their abilities. But letting the students at least discuss make some decisions maybe not necessarily implement them until they're vetted, but having that opportunity as opposed to just sometimes especially early on placements following around and being told what to do, but really trying to get them involved at the early stages of analysis, observation, looking at their objective findings, and trying to come up with some plans with the senior preceptor, and then discussing them together potentially with a larger group of other professions, and then seeing where it goes and if again, competent enough allowing them to participate in that application, I think is a much more rewarding experience than just watching and being told what to do. – Participant 2004 (Interview)

Some participants also noted how the level of supervision provided could depend on the students' educational level – i.e. first-year or second-year students.

I think it depends where students are at in their learning and placements if it's their first one or their last one. Sometimes people need a little bit more, but I also know that when we have less, less direct supervision, at least for myself,

sometimes our work is better because we're more like free to make mistakes and take risks and try things and not like safety risks but just like try things that maybe wasn't right exactly written out in our plan. And I think a lot of learning happens when we're kind of independent. – Student (Focus group)

However, some clinical instructors highlighted how preceptors being too hands-off with their supervision could pose some risks to the student's professional and interprofessional learning.

I would suggest this, as you call CIs more hands-off, there is potentially some risk of the students, maybe using, I don't want to use the word inadequate but I don't have a better word for right now, professional reasoning or whatever it may be and not having enough guidance at the time that they need it, I see that as maybe a risk if they're too hands off. – Clinical instructor (Focus group)

3.3 Self-reflection

Coming from an educational background that provided limited collaborative learning opportunities among students in healthcare programs, I was fascinated by the potential of IPE to fill those gaps. As a researcher conducting this study, I entered the research process with some preconceived notions about the most effective methods to develop and improve students' interprofessional learning. My recent experience as a student of a physical therapy clinical program preparing students for entry-to-practice, made me believe hands-on and real-life experiences provided by practical learning opportunities provided the best opportunities to truly understand the concepts of interprofessional learning in healthcare.

Over the course of data collection, as I interacted with the participants, I became more conscious of the different perspectives and experiences of students and clinical instructors. Similar to my beliefs, many students also believed that practical learning opportunities may be best suited to develop and improve students' interprofessional competencies, however, my interactions with clinical instructors challenged my

preconceived beliefs and prompted me to reconsider the value of theoretical learning within the context of IPE.

Throughout the data analysis process, it was important for me to remain mindful of my initial perceptions and make sure that they did not affect how I interpreted the findings. I actively tried to maintain objectivity and let the voices of the participants speak for themselves by staying consistent with the methodological process, constantly reflecting, and seeking inputs from my supervisor. I did this to avoid having my own biases influence the results and to make sure the results were based on the participants' real experiences and perceptions.

Chapter 4

4 Discussion

The purpose of this study was to identify beneficial strategies for the development and implementation of IPE placements that would be valued by students and clinical instructors in rehabilitation programs. Interviews and focus groups were used to address this research purpose. Themes relating to participants' views, general structure, learning activities, and supervision for an IPE placement were identified. Results will be discussed in relation to similar research on this subject, as well as the framework for action on interprofessional education and collaborative practice (World Health Organization, 2010).

4.1 Views on IPE placements

The results of this study provided valuable insights into the views and experiences of students and clinical instructors regarding IPE as well as IPE placement opportunities. The study revealed that both students and clinical instructors value IPE and that they share similar ideas regarding IPE placements. Both participant groups provided similar descriptions of what an IPE placement could look like, emphasizing the value of providing students with opportunities to collaborate and learn with other healthcare professionals while minimizing duplication of services. This is consistent with previous research that highlights the value of interprofessional teamwork and collaborative learning in educational outcomes, such as improved understanding of one's professional roles and responsibility (Barr, 2005; Jones & Jones, 2011; Pitout et al., 2016; World Health Organization, 2010).

Both students and clinical instructors believed practical opportunities like placements would be beneficial for integrating IPE into students' training as placements provide students with real-life experiences. Interestingly, students emphasized the need for IPE practical opportunities as they felt their previous exposure to IPE through courses alone was not as beneficial to their interprofessional development. This may be because practical experiences provide students with opportunities to observe collaborative

practice in action, and also practice and apply what was taught during their courses. This finding corroborates results from previous studies that identified students value the realism that practical learning opportunities provide (Morison et al., 2003; Reeves et al., 2002; Strong et al., 2014; Visser et al., 2019). The study by Morison et al. (2003) provided one group of students with interprofessional learning opportunities in a classroom and another group of students with interprofessional learning opportunities in both a classroom and a clinical setting. Most students felt the classroom provided fewer learning opportunities and the clinical setting was better suited for interprofessional learning. Therefore, providing students with a combination of structured courses and practical opportunities may provide a more wholesome view of IPE and result in the consolidation of these skills for their future clinical practice. Another identified benefit of an IPE placement opportunity was peer support. An IPE placement provides students the opportunity to share skills, knowledge, and experiences among their peers from different disciplines, and this can provide a unique learning opportunity that may be unavailable in a sole professional placement (Barr, 2005). Participants from the current study acknowledged that including multiple students from different disciplines in an IPE placement could be beneficial to their ability to collaborate and problem-solve. The presence of other students within that placement opportunity would provide peer support and the opportunity to seek feedback from others going through similar experiences. Peer support could also allow students to feel safe and supported while learning new skills without worrying about making mistakes or being judged (Parsell & Bligh, 1999). Further, it provides students with opportunities for introspection and self-evaluation while also encouraging them to take chances and challenge themselves (Bridges et al., 2011). Peer support can also help students grow by introducing challenges they may face in clinical settings on a placement opportunity, such as differences in communication styles, and interprofessional team conflict. Furthermore, students may better understand and appreciate the other healthcare professions by working and learning from one another, ultimately preparing them for collaborative practice.

The current study also identified some barriers that could limit the successful development and implementation of IPE placements. Participants identified the setting of the placement, support from the administration, and individual professional development

as possible obstacles that could affect the success of an IPE placement. It could be said that the setting of the placement is interrelated with the support from the administration because this was discussed within the context of the availability of placement settings for IPE learning. The availability of a suitable placement site may be constrained by a lack of infrastructure and resources, which can make it challenging to provide students with a meaningful interprofessional learning experience. Insufficient support from the administration can also make it difficult to secure funding, allocate resources and provide staff and preceptors with adequate support to effectively develop and implement an IPE placement. These two limitations correlate with recommendations made by the WHO framework for action on interprofessional education and collaborative practice, as well as previous literature, which emphasizes the need for supportive organizational and institutional policies in enabling effective IPE initiatives (Boshoff et al., 2020; Curran et al., 2005; Hinderer et al., 2016; World Health Organization, 2010). Hence, addressing one limitation, such as support from the administration, can often help alleviate other limitations, such as the availability of placement settings. Finally, according to a study by Reeves et al. (2016), while IPE programs were found to improve learners' interprofessional attitudes and teamwork skills, they could also hinder the learners' individual professional development. Similarly, students that participated in this study were fearful of an IPE placement limiting their individual professional development. To avoid this, IPE placements should be designed in a way that balances the interprofessional and profession-specific learning needs of each student. This could be accomplished by providing each student with personalized feedback and guidance, establishing their own learning objectives, and giving them chances to engage in self-directed learning and reflective practice (Thistlethwaite & Moran, 2010).

4.2 General structure

This study identified strategies related to the general structure of an IPE placement. These strategies should be considered when developing IPE placements. The strategies discussed include which disciplines should be involved, setting of choice, mode of delivery, duration of the placement, and training for preceptors.

The findings from this study indicate that it is important for the disciplines involved to have overlapping roles or share some common roles and responsibilities in patient care (World Health Organization, 2010). Assessment, diagnosis, treatment, and follow-up care are some opportunities to have shared roles and responsibilities. For example, when assessing and treating a patient's mobility and function, the roles of a physical therapist and an occupational therapist may overlap. This strategy was especially important to the students who emphasized they did not want to feel like the placement was a wasted learning opportunity. Additionally, some of the students mentioned how they believed they could benefit from more IPE opportunities with disciplines outside rehabilitation therapy programs. They believed there may be a missed opportunity in limiting their IPE opportunities to only rehabilitation therapy disciplines, highlighting some professionals that could also be beneficial to their interprofessional learning, such as nurses, teachers, mental health professionals, dieticians, and ear, nose, and throat (ENT) specialists. Including some of these professionals in IPE placements with rehabilitation therapy students may in fact improve their ability to provide comprehensive and holistic care. Students may benefit from working with nurses to better understand a patient's medical background and any drugs that may impact function related to their own scope of practice (Dondorf et al., 2015). Collaborating with teachers could help students develop skills in providing educational support to children with disabilities or special needs, such as adapting classroom activities to suit the unique needs of the children (Archibald, 2017). Mental health professionals could help students understand the psychosocial and emotional aspects of patient care (Strong & Randolph, 2021). Working with dieticians could help students understand the importance of nutrition and its impact on a patient's health and well-being, and collaborating with ENT specialists could help students better understand balance disorders and vocal care for example (Han et al., 2011). The learning objectives and the nature of the patient population may be taken into consideration when choosing the disciplines for an IPE placement. Although including multiple disciplines in an IPE placement may be done to improve the interprofessional learning experience, it is crucial to make sure that each discipline is justified within each setting. It may also be important to avoid involving too many disciplines in an IPE placement, as this may be challenging and may hinder the achievement of specific learning objectives (Hammick et

al., 2007; Rosenfield et al., 2011), all of which take clear planning and goal setting during the design of the placement opportunity.

The clinical setting for an IPE placement is another important consideration during the development stage of an IPE placement, as this can have an impact on the success of the learning experience. The WHO stresses the importance of fostering an environment for IPE that encourages efficient teamwork and collaboration among the disciplines involved within that placement setting (World Health Organization, 2010). This includes the need for a well-designed clinical setting that fosters effective communication and collaboration. Participants highlighted the need for an IPE clinical setting to be intentional, collaborative, and promote teamwork across the different disciplines involved. “Intentional” implies that the setting should be purposefully designed and structured to facilitate interprofessional collaboration. “Collaborative” suggests that the clinical setting should encourage different disciplines to work together towards a common goal. “Promoting teamwork” indicates that the clinical setting should encourage communication, mutual respect, and trust between the different disciplines involved, allowing them to work together effectively. These suggestions for the clinical setting of an IPE placement are also reflected in previous literature (Boshoff et al., 2020; Brewer & Stewart-Wynne, 2013; Hammick et al., 2007; Interprofessional Education Collaborative, 2016b; Reeves et al., 2016).

The conflicting views of clinical instructors and students on the effectiveness of virtual IPE delivery methods emphasized the significance of choosing the right mode of delivery for IPE opportunities in the clinical setting. Although virtual techniques can alleviate some limitations experienced by clinical instructors in the development of IPE placements such as limited resources; the efficacy of virtual methods of interaction to foster interprofessional collaboration and communication may be limited (Alrasheed et al., 2021; Herriott & McNulty, 2022). Thus, it may be necessary to balance the benefits and limitations of virtual methods in relation to the specific objectives and outcomes of the IPE placement. Furthermore, it may be beneficial to consider the experiences and perceptions of students before selecting the mode of delivery for IPE learning

opportunities, as the students in the current study reported negative attitudes towards virtual methods for IPE delivery, but this may not be the case for all students.

The literature reveals a debate surrounding the optimal duration of IPE practical opportunities; some studies have suggested shorter, intensive IPE programs may be just as beneficial as longer programs, especially if they are developed to target specific learning outcomes (Annear et al., 2016; Brack & Shields, 2019; Hall et al., 2011; Singer et al., 2018). Shorter placements can allow for more flexibility in scheduling, making it easier to facilitate and implement valuable opportunities for students from various disciplines. However, other studies have discussed the significance of longer-duration IPE programs, arguing that they allow for more meaningful relationships to be formed among students and also allow for a deeper comprehension of each other's roles and responsibilities (Holthaus et al., 2015; Packard et al., 2016; Reeves & Freeth, 2002; Rotz et al., 2015). While the literature does not provide an internationally standardized duration for IPE placements, the length of the practicum should be long enough for students to achieve the targeted learning objectives (Barr, 2005). In the current study, students and clinical instructors had conflicting opinions about the ideal duration of an IPE placement, thus it may be beneficial to adopt an individualized strategy when developing and implementing an IPE placement. For instance, shorter placements may be made available for students as optional or supplementary learning experiences, letting them select the duration that best meets their needs and learning preferences. Another alternative is to employ a hybrid approach which divides a longer placement into shorter, more intensive modules to allow for flexibility in scheduling and a focus on particular learning outcomes.

According to the literature, preceptors play a key role in ensuring the success of an IPE placement (Boshoff et al., 2020; Giordano et al., 2012; Stew, 2005; World Health Organization, 2010). Therefore, providing preceptors with training could improve their knowledge, skills, and attitudes toward IPE. The study by Hinderer et al. (2016) identified preceptors' confidence in IPE delivery as a barrier to their participation in IPE programs. It is crucial to note that, even though IPE training for preceptors can be beneficial, mandating this training could pose barriers to their participation in an IPE

placement, at least in part because of their busy schedules and heavy workloads (Hammick et al., 2007). Instead, this training may be presented as an opportunity for professional growth and continued education, which could also improve the quality of care provided to patients. Encouraging preceptors to participate in this training may also help them fulfill the professional development requirements for their professional licensing, while also improving their ability to supervise and train students from different healthcare disciplines. This could potentially lower the overall burden of student supervision at a facility or site as a whole.

4.3 Learning activities

The WHO framework highlights the value of providing students with opportunities to engage in collaborative training activities where they can learn about, from, and with one another. These learning activities ought to be designed to encourage the growth of skills like leadership, cooperation, and communication which are essential for successful interprofessional collaboration (Interprofessional Education Collaborative, 2016b). This study identified several learning activities that students and clinical instructors perceived as beneficial to IPE placements, including team rounds, reflection activities, peer evaluation and coaching, creating resources together, sharing and observing sessions, education on interprofessional competencies, and shadowing another discipline's preceptor. The WHO framework highlights the significance of learning activities that promote collaborative practice, interprofessional communication, and shared decision-making, and while both participant groups – students and clinical instructors – had some conflicting views on some of the previously mentioned learning activities, these activities could be said to align with the WHO recommendations.

Team rounds, defined as regular meetings in which healthcare professionals from different disciplines come together to discuss patient cases, share their expertise and perspectives, and collaboratively develop treatment plans (Halm et al., 2003), was a learning activity agreed upon by both students and clinical instructors. This learning activity can provide an opportunity for students to practice effective communication skills, which are essential for successful interprofessional collaboration. Through team rounds, students and clinical instructors can engage in collaborative problem-solving,

enabling them to develop a better understanding of each other's roles and responsibilities and how they can work effectively within a team. Previous studies have also identified the value of team rounds as a learning activity in interprofessional practical opportunities (Aase et al., 2014; Walker et al., 2019). In the study by Walker et al. (2019), students found interprofessional team meetings, education sessions, and grand rounds to be valuable for enhancing their learning experience. It is important to remember that the effectiveness of team rounds and debriefs in an IPE placement could depend on several factors, including how the learning activity is facilitated, the participation of all team members, and the willingness of the students to participate (Hall & Zierler, 2015). Therefore, staff and preceptors must obtain sufficient training on how to effectively facilitate team rounds in an interprofessional setting.

To achieve a thorough understanding of learning, it is vital to consider the internal processes of knowledge and skill acquisition that take place within the learner, as well as the external interactions between the learner and their social, cultural, and material environment (Thistlethwaite & Moran, 2010). Peers are a crucial part of these external interactions, as they are situated within the learner's social environment and they also play an important role in students learning about, from, and with each other. Therefore, peers – other healthcare professionals in training – are a vital component in an interprofessional placement. The findings of the current study reinforced this notion as participants suggested peer evaluation and coaching would be valuable learning activities for an IPE placement. Peer evaluation involves students evaluating and providing feedback on the performance of their peers (Boud et al., 2014). This approach can help students in an IPE placement develop a better understanding of their own strengths and opportunities for improvement, as well as those of their peers. Additionally, peer evaluation can encourage students to take a more active role in their own learning and can promote critical thinking (Boud et al., 2014). On the other hand, peer coaching can be defined as a 'voluntary, reciprocal helping relationship between individuals of comparable status who share a common or closely related learning/development objective' (Eisen, 2001, p. 5). Peer coaching can be a valuable learning activity in IPE placements, as it can provide students with opportunities to learn from each other and improve their communication and collaboration skills. For example, a second-year

occupational therapy (OT) student could coach a first-year physical therapy (PT) student on an overlapping area of their scope or related to communication or documentation skills. Peer coaching could also provide the second-year OT student with opportunities to reinforce their learning and skills, while also developing their leadership and communication skills. Peer evaluation and coaching may also allow students to receive feedback in a supportive and non-threatening environment, which may enhance their confidence and motivation to learn.

Reflection activities, such as journaling and group reflections, were identified as valuable learning activities for an IPE placement. Students and clinical instructors emphasized how these activities could promote personal and professional self-awareness, and improve interprofessional collaboration and communication skills (Tsingos et al., 2014). However, during the focus group discussion, students preferred group reflections and felt that reflective journaling might be too personal to share with preceptors. There may be some merit to students' preference for group reflections, as a study by Hem et al. (2018) reported positive attitudes toward group reflections within a multidisciplinary clinical setting. Participants noted group reflections erased any perceived hierarchy between the various professions and provided a safe space to reflect (Hem et al., 2018). Group reflections can provide an opportunity for students to collectively share their experiences and perspectives while learning from their peers. Despite the advantages of group reflections, little is known about which forms of reflection are the most beneficial, and some students may still choose reflective journaling as a preferred means of personal expression and reflection (Gallé & Lingard, 2010). It may be beneficial for staff and preceptors to provide students with a variety of reflection activities and allow them to choose the activity that best suits their learning styles and preferences. Furthermore, students may be motivated to engage in reflection if they were provided with clear guidelines on their purpose and format, and how they can impact learning and interprofessional development (Platzer et al., 1997; Tsingos et al., 2014).

The collective creation of learning resources such as assessment forms, referral pathways, and educational resources for patients was another identified learning activity for IPE placements by the participants in this current study. This learning activity can allow

students to collaborate and actively participate in patients' care, which can be beneficial in developing their professional and interprofessional competencies (Reeves et al., 2013; World Health Organization, 2010). Creating referral pathways and educational resources for patients can also provide students with a shared understanding of the health-related needs of different patients. One student, however, felt this learning activity was best suited for the classroom. This preference may have been due to factors such as the student's prior IPE experience or their preferred learning style. This finding suggests that some students may see this learning activity as one suited for a more structured learning environment like the classroom and may find the learning activity challenging for a clinical setting. This means preceptors should be prepared to provide each student with as much support as required to succeed in different learning activities.

During interviews, sharing and observing treatment sessions were brought up as beneficial learning activities for an IPE placement. Sharing of treatment sessions within an IPE placement involves students from different disciplines collaborating to provide treatment to a patient. Observing treatment sessions involves students from different disciplines watching how their peers provide care to a patient. However, during the focus group discussion, the majority of participants agreed sharing treatment sessions may be more beneficial than observing sessions in an IPE placement. While both activities can be beneficial in educating students on the roles and responsibilities of their peers, this preference suggests that the majority of the participants perceived that actively participating in interprofessional interactions is more valuable to interprofessional learning than passive observation. This finding is consistent with previous literature that has identified the value of active engagement in learning (Barr, 2014; Cavanagh, 2011; Imafuku et al., 2018). However, observing treatment sessions may encourage students to engage in reflective practice by encouraging them to critically analyze what they observe and consider how they can apply that knowledge to their own practice. Students may also benefit from observing sessions early on in a placement opportunity before progressing to a more active role as the placement continues. This would allow the students to become familiar with the work environment and the responsibilities they will be expected to carry out.

The findings from this study also indicated that students could benefit from some structured education on interprofessional competencies within a placement opportunity. Although this learning activity aligns with the recommendations of the WHO framework encouraging the need to develop and assess IPE competencies to prepare students for effective interprofessional collaboration in clinical practice (World Health Organization, 2010), clinical instructors collectively agreed that this learning activity may be best suited for the classroom. This point of view from the clinical instructors may reflect the challenges associated with effectively integrating structured training on IPE competencies into a clinical setting that is already complex and time-constrained. Interestingly, the students voiced no opinions regarding this learning activity during the focus groups, which may be due to a lack of familiarity with specific IPE competencies. One potential solution to address the challenges highlighted by the clinical instructors is to incorporate a structured module on IPE competencies into the curriculum of the students' program. Students would be required to complete this module over the course of the IPE placement, providing them with the necessary knowledge at a time that is accurately relevant to their learning and allowing them to implement strategies in real time during the placement. A module-based system reduces the burden on individual clinical instructors and maintains consistency across programs, placement sites, and preceptors to meet interprofessional collaboration learning outcomes.

Lastly, shadowing another preceptor in an IPE placement was identified as a beneficial learning activity. Shadowing involves students observing and learning from a healthcare professional from a different discipline. The student shadows the preceptor as they go about their work, watching how they interact with other healthcare professionals, patients, and their families. The student may also get the chance to ask the preceptor questions and learn more about their profession, including their roles and responsibilities in the care of different patients. During the focus group discussion, both students and clinical instructors expressed the opinion that this strategy would only be beneficial if the disciplines involved in the placement had overlapping roles. Therefore, this learning activity may be beneficial in a placement opportunity involving rehabilitation therapy students where there is some degree of natural overlap in the assessment and management of certain conditions. Shadowing another discipline's preceptor could also

allow students to understand how co-morbid conditions, like a motor deficit or a speech disorder, may affect their practice. Participants further proposed taking a client-centered approach by having students follow the client through their different treatment programs across the different disciplines. This suggestion aligns with the WHO recommendations which discuss the importance of taking a patient-centered approach to IPE and practice (World Health Organization, 2010). A client-centered approach in a placement opportunity can prepare students to deliver patient-centered care in a multidisciplinary clinical setting, as this approach focuses on the individualized needs and goals of patients and coordinated care across different disciplines to meet those needs and goals.

4.4 Supervision

Supervision plays an essential role in providing students in an IPE placement with the appropriate support and guidance in their interprofessional learning (Hoffman, Harris, et al., 2008; Ponzer et al., 2004). Strategies that emerged from this study regarding supervision within an IPE placement included shared supervision, an IPE facilitator, role emerging placements, and the level of supervision provided.

Shared supervision, which involves multiple preceptors from various healthcare disciplines, accompanied by the inclusion of supervision from profession-specific preceptors was proposed by a majority of students and clinical instructors in this study as a beneficial supervision model for IPE placements. Shared supervision was believed to provide students with opportunities for both interprofessional and professional development within an IPE placement. This finding aligns with the Interprofessional Education Collaborative (2016), which highlights the need for professional and interprofessional development during IPE programs. A scoping review by Boshoff et al. (2020) identified twenty-seven studies that provided students with IPE practical opportunities, twenty-one of these studies were noted to have incorporated shared supervision within their placement model, however, only two studies explicitly stated that discipline-specific supervision was also provided in those placement opportunities. While this indicates that shared supervision is the most widely used supervision model in IPE placements, it is unknown how common it was to also include discipline-specific supervision. The value of including supervision from a profession-specific preceptor has

been emphasized in the literature (Chipchase et al., 2012; Yang et al., 2017). In the study by Yang et al. (2017), students reported that the feedback provided by interprofessional preceptors was not always significant to their professional development due to its generic nature. This implies that while shared supervision can provide students with the opportunity to learn from preceptors from different disciplines, as well as how to collaborate effectively on a team, the inclusion of profession-specific preceptors provides students with opportunities to develop specific professional competencies, enhancing their overall clinical development. Findings from the current study corroborate the inclusion of interprofessional and discipline-specific preceptors as students were hesitant to be supervised only by interprofessional preceptors.

An IPE facilitator within the context of this study could be described as an individual responsible for coordinating and facilitating IPE programs, either in an academic or clinical setting. They could be a staff within that setting or someone hired especially for the position responsible for planning, implementing, and evaluating interprofessional activities, supporting clinical instructors and students, and fostering communication and collaboration across various disciplines (Grymonpre, 2016). A study by Buring et al. (2009) suggested an IPE facilitator could also alleviate issues related to scheduling and logistics. However, clinical instructors in this study believed this type of role may be unnecessary for an IPE placement, as filling the role of an IPE facilitator may be affected by the availability of funding and human resources, some even suggested making this an unpaid position to address the possible funding issues. Although this strategy may be beneficial to students' interprofessional learning, results from the current study suggest that it may be important to consider the availability of resources when considering the feasibility of this strategy.

Role emerging placements, which provide students with opportunities to build new roles or practices that are yet to be established or acknowledged in conventional healthcare or social care settings, seem to have originated from the occupational therapy discipline, instigated by the increasing need to provide students with practical opportunities (Clarke et al., 2014). While the value of this strategy is yet to be explored with regards to IPE, role-emerging placements have been noted by students to provide opportunities for

empowerment, sensitivity training, as well as personal and professional growth, as many of these placements involve working with marginalized populations (Clarke et al., 2014). However, the literature also reveals some mixed views regarding this strategy, as some students notably preferred learning opportunities in more traditional medical settings over those offered in role-emerging settings (Friedland et al., 2001). Due to the lack of literature regarding this strategy, it is difficult to ascertain what value it may provide to students' interprofessional learning. Role-emerging placements could be presented to students as a voluntary opportunity for students who are interested and seek a more challenging placement experience, ensuring that students who are not interested in this type of experience are not unfairly placed in a challenging situation.

Participants in this study agreed the level of supervision provided by preceptors in an IPE placement was another strategy to consider. According to WHO, IPE should prepare students for collaborative practice and patient-centered care (World Health Organization, 2010). Providing students with opportunities to actively participate in patient care can help foster those skills, and the level of supervision provided could influence this participation. The findings of the current study suggest that allowing students to make more decisions regarding their patient's care could be advantageous for their interprofessional learning, however, there was a debate on the level of autonomy to provide to students in an IPE placement. While some participants advocated for more autonomy for the students, the risks to students' professional and interprofessional development were also emphasized as a possibility if given too much autonomy. A study by Boyce et al. (2020) highlighted how the level of autonomy provided to students depended on the preceptor's level of trust in the student's ability to perform required tasks, such that the higher the level of trust, the higher the level of autonomy provided to the students (Boyce et al., 2020). Similarly, participants also suggested that the level of supervision provided in an IPE placement should depend on the student's educational level and the competencies they display. Identifying the level of autonomy to provide each student within a placement opportunity may seem challenging, but findings from this study indicate it is important for the successful implementation of an IPE placement.

Chapter 5

5 Conclusion

This study aimed to identify strategies valued by students and clinical instructors in the development and implementation of IPE placements. With the use of interviews and focus groups, themes relating to views on IPE placement, the general structure, learning activities, and supervision for IPE placements were explored.

5.1 Strengths of the study

A strength of this study was the use of both interviews and focus groups, these multiple methods allowed for the triangulation of data and provided a comprehensive understanding of the perceptions and experiences of both participant groups. The use of both interviews and focus groups also contributed to the rigor and credibility criteria (Tracy, 2010), allowing the researcher access to multiple data sources and the opportunity to compile data from both individual and group discussions. Another strength of the current study was the inclusion of both clinical instructors and students. The input of clinical instructors provided insights into the current state of IPE in the educational and clinical settings, including existing barriers and facilitators to its implementation. The input of students in this study also provided insights into their experiences with IPE and the impact it had on their professional and interprofessional development. Lastly, recruiting participants with previous IPE experience was another strength of the current study. Participants in this study were able to provide valuable insights into the development and implementation of IPE placements through comparison and reflection on previous IPE experiences, further enriching the data collected.

5.2 Limitations of the study

Although the researcher aimed to recruit a diverse range of participants from all four rehabilitation therapy programs (physical therapy, occupational therapy, speech-language pathologist, and audiology), some conflicts of interest developed during the recruitment phase, making it difficult to do so (conflicts discussed in a previous chapter). As a result

of this, recruitment was challenging and resulted in a smaller sample size. Additionally, the recruitment period could have influenced the lack of representation from all rehabilitation therapy programs as some programs may have had conflicting schedules that did not fit the data collection timeline of this study. The researcher had hoped that the recruitment period would improve the chances of recruiting a larger sample size for the student participant group considering recruitment began from May till December 2022. The researcher had hoped to recruit outgoing second-year students rounding up their programs in August 2022, as well as incoming second-year students beginning the final year of their programs in September 2022. However, despite this limitation in sample size, the study was able to obtain views from the majority of the targeted rehabilitation therapy programs and involve different contributors from different programs across two data collection methods.

The use of the focus group including both instructors and students was also a limitation of the current study due to the power dynamics between the two participant groups. Students may have felt uncomfortable sharing their honest opinions in the presence of their instructors, affecting the type of responses provided. We attempted to mitigate these limitations by creating a safe and judgment-free space for participants to contribute and make suggestions freely. Participants were also reminded that their responses would have no impact on their academic standing and were asked to respect each other's privacy and refrain from repeating what was discussed in the focus group outside of that time. Despite these limitations, the data collected from this study provided valuable insights into the perceptions of rehabilitation therapy students and clinical instructors regarding valuable strategies for developing and implementing IPE placements.

5.3 Recommendations for practice

Based on the findings of the current study, some recommendations to consider when developing and implementing IPE placements in rehabilitation therapy settings include:

1. Considering the placement setting when deciding which disciplines to include within that placement opportunity to ensure that each discipline involved feels valued. Participants agreed that the placement setting has an impact on the

disciplines to include, in order to ensure proper representation and inclusivity, which can influence the value of interprofessional learning within that placement.

2. Providing staff with adequate support and training to effectively facilitate students' interprofessional learning. Both participant groups agreed that staff members play crucial roles in facilitating students' interprofessional experiences, therefore providing them with adequate support and training will equip them to guide and facilitate interprofessional learning within that placement opportunity.
3. Including learning activities such as team rounds, reflective exercises, creating resources together, and peer evaluation and peer coaching to promote interprofessional learning. These learning activities were generally agreed upon by both participant groups in this study as beneficial for promoting interprofessional learning within a placement.
4. Providing students with supervision from other discipline preceptors with the inclusion of discipline-specific supervision to enhance their learning. This supervision model was agreed upon by both students and clinical instructors in this study to provide students with opportunities to improve interprofessional and discipline-specific competencies.
5. Including an IPE facilitator to help coordinate scheduling and other IPE-related learning for the students. This strategy received mixed opinions; however, it was evident that while the inclusion of an IPE facilitator in a placement opportunity would be beneficial, this would be dependent on the availability of resources.

5.4 Recommendations for future research

Future research should build upon this study's findings by focusing on the experiences and perceptions of students and clinical instructors in the rehabilitation therapy programs that were not represented in this study. This includes audiology students and clinical instructors, occupational therapy students, and speech-language pathology instructors. This could provide a more fulsome view of valuable strategies to consider in the development and implementation of IPE placements for all four rehabilitation therapy programs. Another area for future research includes implementing strategies identified from this study into the development of an IPE placement for rehabilitation therapy

students and assessing the impact of these strategies on students' engagement and learning. This could contribute to best practices for IPE placements in rehabilitation therapy and possibly improve the quality of interprofessional placement opportunities for students and clinical instructors.

5.5 Conclusion

This study highlights the value of considering the perspectives of both rehabilitation therapy students and clinical instructors regarding the development and implementation of IPE placements. The findings of the study revealed strategies valued by both participant groups, as well as challenges that can inform the development and implementation of IPE placements that promote collaboration and patient-centered care. Overall, this study contributes to the growing body of literature on IPE in rehabilitation therapy.

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Appendices

Appendix A: Ethics Approval Notice



Date: 24 May 2022

To: Dr. Laura Brunton

Project ID: 120550

Study Title: Valued Strategies in the Development and Implementation of Interprofessional Education Placements

Application Type: HSREB Initial Application

Review Type: Delegated

Full Board Reporting Date: 14/June/2022

Date Approval Issued: 24/May/2022 08:57

REB Approval Expiry Date: 24/May/2023

Dear Dr. Laura Brunton

The Western University Health Science Research Ethics Board (HSREB) has reviewed and approved the above mentioned study as described in the WREM application form, as of the HSREB Initial Approval Date noted above. This research study is to be conducted by the investigator noted above. **All other required institutional approvals and mandated training must also be obtained prior to the conduct of the study.**

Documents Approved:

Document Name	Document Type	Document Date	Document Version
Valued IPE Strategies Protocol	Protocol	09/Mar/2022	1
Focus Group Guide	Focus Group(s) Guide	10/Mar/2022	1
Interview Guide for Research Participants (Clinical preceptors and Faculty)	Interview Guide	04/Mar/2022	1
Interview Guide for Research Participants (Students)	Interview Guide	04/Mar/2022	1
Demographic_Information_for_Students	Online Survey	05/May/2022	2
Demographic_Information_for_Clinical_Preceptors_and_Faculty	Online Survey	05/May/2022	2
Email Script for Recruitment (Students)	Email Script	05/May/2022	2
Email Script for Recruitment (Clinical preceptors and Faculty)	Email Script	05/May/2022	2
In-person Script for Recruitment (Students)	Email Script	05/May/2022	1
In-person Script for Recruitment (Clinical preceptors and Faculty)	Email Script	05/May/2022	1
Letter of Information and Consent	Written Consent/Assent	16/May/2022	3

Documents Acknowledged:

Document Name	Document Type	Document Date	Document Version
TRAC Response Template - NVivo	Technology Review document	09/Mar/2022	

No deviations from, or changes to, the protocol or WREM application should be initiated without prior written approval of an appropriate amendment from Western HSREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University HSREB operates in compliance with, and is constituted in accordance with, the requirements of the TriCouncil Policy Statement: Ethical

Appendix B: Demographic information survey

Demographic Information for Students

Start of Block: Default Question Block

Q1 Study ID

Q2 What is your age?

Q3 What is your sex?

Q4 What is your gender?

Q5 What rehabilitation therapy program are you currently registered in?

Q6 What is your undergraduate educational background?

Demographic Information for Clinical Preceptors and Faculty

Start of Block: Default Question Block

Q1 Study ID

Q2 What is your age?

Q3 What is your sex?

Q4 What is your gender?

Q5 What rehabilitation therapy program are you currently working at?

Q6 What is your previous Interprofessional working experience?

Appendix C: Interview guide

Interview Guide for Research Participants (Student)

Thank you for meeting me today and for participating in this study. We are here to discuss your previous IPE experience(s) and what you perceive as beneficial to interprofessional learning. Please note that at any time during this interview you may pause to reply to or skip any questions. Once you feel comfortable and ready to start the interview, I will begin the audio-recording. Are you ready to begin?

Questions

1. Can you tell me about your experiences with IPE to date?
 - a. When were you introduced to Interprofessional Education (IPE)?
 - b. How were you introduced to IPE?
 - c. What have you come to know about IPE?
 - d. What do you think are the goals of IPE?
2. From your experience, what are some benefits and limitations to including IPE in rehabilitation programs?
3. Can you tell me about a positive IPE experience you had?
 - a. What made this a good experience?
4. Have you had any bad IPE experiences?
 - a. What made this a bad experience?
 - b. What would have made this experience more valuable?
 - c. What would you have changed or done differently?
5. What do you think are the benefits and challenges associated with introducing IPE during students' clinical training vs. letting them experience interprofessional practice once they graduate and start working?
6. How do you think IPE could be best integrated into your education/training?
7. What do you think about IPE placements – would this be a good way to integrate IPE in your training?
8. You previously identified _____ as the goals of IPE, how do you think these could be achieved in a placement opportunity?
9. What learning strategies or activities do you think would be valuable in an IPE placement?
 - a. Why do you think these strategies would be valuable to your IPE learning?
10. How do you think supervision with preceptors should be structured in an IPE placement?
 - a. What are the benefits/limitations to this type of supervision model?
11. Do you have any other ideas for integrating IPE into clinical education/placements that you would like to share?

Interview Guide for Research Participants (Clinical Preceptors and Faculty)

Thank you for meeting me today and participating in this study. We are here to discuss your previous IPE experience(s) and what you perceive as beneficial to interprofessional learning. Please note that at any time during this interview you may pause to reply to or skip any questions. Once you feel comfortable and ready to start the interview, I will begin the audio-recording. Are you ready to begin?

Questions

1. Can you tell me about your experiences with IPE to date?
 - a. When were you introduced to Interprofessional Education (IPE)?
 - b. How were you introduced to IPE?
 - c. What have you come to know about IPE?
 - d. What do you think are the goals of IPE?
2. From your experience, what are some benefits and limitations to including IPE in rehabilitation programs?
3. Can you tell me about a time working interprofessionally was beneficial in a work environment?
4. Have you ever been involved in the development or implementation of an IPE program/curriculum to support students' learning?
 - a. If no, move to the next question
 - b. If yes:
 - i. Do you think the experience was beneficial to your students' IPE learning?
 - ii. What do you think made this experience beneficial?
5. When do you think is the ideal time to introduce students to IPE?
6. How do you think IPE should be integrated in students' coursework and/or clinical practicum placements?
7. What do you think about IPE placements – would this be a good way to integrate IPE into your students' training?
8. You previously identified _____ as the goals of IPE, how do you think the goals these could be achieved in a placement opportunity?
9. What learning strategies or activities do you think would be valuable to your students (and you as a preceptor) in an IPE placement?
 - a. Are these different from the strategies/activities you would use for a single discipline placement?
 - b. How would these strategies be valuable to your students' IPE learning?
10. How do you think supervision with preceptors should be structured in an IPE placement?
 - a. What are the benefits/limitations to this type of supervision model?
11. Do you have any other ideas for integrating IPE into clinical education/placements that you would like to share?

Appendix D: Focus group guide

Focus Group Guide

Hello everyone, I hope you all had a relaxing weekend, I know I didn't. Thanks again for meeting today and participating in this study.

Preamble

- Today we will be talking about themes that have been generated from the data collected during the interview stage of this project. The purpose of this focus group is to collectively discuss different strategies identified in our interviews, which could be valuable to the development and implementation of IPE placements. These strategies have been grouped into three themes, which are: general structure, learning activities and supervision – all three themes will be discussed in this focus group today.
- The focus group is expected to last approximately 2 hours.

Before we begin, I would like to go over some ground rules for the session:

- There are no right or wrong answers.
- Participation is voluntary and you may wish to leave this meeting at any time if you wish to no longer participate.
- Withdrawal from this meeting at any time, as well as all comments made, will have no effect on your academic standing, placement opportunities or performance in any program elements.
- While others are sharing, please listen respectfully (1 person at a time) – because this session is being conducted on a virtual platform, I would appreciate if you could use the raise your hand feature to indicate your interest in speaking.
- You are welcome to take a break and start up again when you are ready and can stop at any time for any reason.
- This session will be audio recorded, transcribed verbatim, and de-identified at the time of transcription. Quotes used in publications will be de-identified.
- It is possible that some participants may repeat what was mentioned during the focus group meetings, however, respectfully we ask that everyone respect each other's privacy and refrain from telling others what was discussed in today's focus group.
- Do you have any questions about the purpose of this focus group or how it will run?

If we have no more questions, may we begin?

Questions

Before we get into the strategies, I would like us to go round and kind of briefly describe what an IPE placement looks like to you.

Great! Now we go into the strategies – We will first discuss the strategies relating to the “general structure” theme

1. It was identified that an IPE placement should be implemented in a setting that encourages collaboration and communication, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the development of an IPE placement?
2. We identified that an IPE placement should be structured to improve the student's professional learning as well as their interprofessional learning, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the development of an IPE placement?
3. Providing some IPE training for the preceptors before the start of the placement was another strategy discussed, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the development of an IPE placement?
4. Delivering IPE placements in shorter durations, like 3-4 weeks as opposed to the usual 8 weeks was also identified, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the development of an IPE placement?
5. In-person was identified as a preferred mode of delivery for an IPE placement, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the development of an IPE placement?

That is all for the strategies related to the general structure, before we move to the next theme, would anyone like to add anything else regarding the general structure of an IPE placement?

Now we will be discussing strategies related to the next theme - which is learning activities

1. Shared sessions with clients, as well as observing other disciplines during these sessions was identified as a strategy related to learning activities in an IPE placement, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?

Students creating resources together, such as assessment forms and referral pathways was also identified, what are your thoughts on this? Do you think there are some benefits to

1. this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
2. Reflexive activities, such as journaling or discussions with preceptors was another learning activity strategy discussed, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
3. Providing students with some formal structured education on the roles of each discipline included in the IPE placement is another strategy, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
4. Team debriefs, meeting or rounds were also discussed as learning activities for an IPE placement, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
5. Shadowing another discipline's professional/supervisor was another identified strategy, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
6. Peer evaluations was also identified as a strategy related to learning in an IPE placement, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
7. Finally, providing students with education on the interprofessional competencies in an IPE placement was also noted, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?

That is all for the strategies related to the learning activities, before we move to the next theme, would anyone like to share anything else regarding learning activities in an IPE placement?

Lastly, we will discuss strategies related to supervision

1. We identified providing students with some shared supervision from all included discipline preceptors as a supervision strategy, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
2. The inclusion of supervision from a discipline specific preceptor for students was also identified as a strategy for an IPE placement, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
3. Including IPE coordinator/facilitator was another strategy related to supervision identified, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?
4. Providing students with less supervision, and allowing them to make more decisions regarding their learning, while also considering safety was the last strategy related to supervision identified, what are your thoughts on this? Do you think there are some benefits to this strategy? Do you think there are some challenges to this strategy? Are there some risks of incorporating this strategy in the implementation of an IPE placement?

That is all for the strategies related to the supervision, before we go would anyone like to add anything else regarding supervision in an IPE placement?

Thanks again for your time, that is all for me today. I will now end the audio recording

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