Interprofessional education workshop on aging: student perceptions of interprofessional collaboration, aging, and cultural fluency

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ABSTRACT
Interprofessional education is vital to prepare students in healthcare-related fields for future practice to improve participation in teams and enhance client/patient outcomes. This study aimed to evaluate the impact of a half-day interprofessional education workshop on aging based on students’ self-rated confidence in working in interprofessional teams, with aging, and culturally diverse clients/patients. Students from eight healthcare-related disciplines at a private mid-western university attended an interprofessional workshop. Afterward, students completed a reflective survey to evaluate pre- and post-workshop perceptions about interprofessional collaboration and caring for aging and diverse clients/patients. Quantitative methods using paired sample t-tests revealed a statistically significant difference in students’ self-reported level of preparedness in the areas of interprofessional education, aging, and cultural fluency (P < .001). In addition, qualitative methods were used to organize data into themes. Additional insights were gained to inform future workshops.

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Introduction
Interprofessional education (IPE) is an essential curriculum component to prepare healthcare-oriented students to participate in collaborative care as they transition to practice. The ability to collaborate across disciplines is vital as interprofessional collaboration has been shown to improve health outcomes at the both the client/patient and system levels. Effective IPE brings students from different disciplines to work together and learn from each other (World Health Organization [WHO], 2010). The Interprofessional Education Collaborative (IPEC) Core Competencies for Collaborative Practice provide guiding principles and a framework for establishing IPE curriculum (Interprofessional Education Collaborative [IEC], 2016).

Higher education has developed a range of IPE activities such as stand-alone courses, workshops, simulated practice experiences, and clinical experiences, which have extended beyond healthcare disciplines to include education and law (Almas & Vasset, 2016; Ashford & Lateef, 2019; Engum & Jeffries, 2012; Keeney et al., 2019; Villadsen et al., 2012; Wharton & Burg, 2017). Healthcare professionals who participated in IPE activities during their education reported that these experiences led them to feel better prepared for interprofessional practice (Pollard & Miers, 2008). In addition to enhanced student perceptions of interprofessional collaboration, IPE has the capacity to foster growth in the IPEC Core Competencies, specifically increasing confidence in working on a team, seeing the value of professional roles, and enhancing interprofessional communication (Baker et al., 2011; Burgunda et al., 2017; Gilligan et al., 2014; Golden & Earp, 2012; Mellor et al., 2013; Regmi & Regmi, 2010; Wharton & Burg, 2017).

Background
Aging
The aging population in the United States and globally is expected to double by 2050 (He et al., 2016). Non-communicable, chronic diseases are the primary cause of increased morbidity and mortality of aging clients/patients (He et al., 2016). Given the complexity of diagnoses in this population, optimal preparation of healthcare professionals who can collaborate seamlessly in interprofessional teams is necessary to optimize client/patient care. The research highlights several IPE approaches to prepare healthcare-oriented students to care for aging clients/patients and participate in interprofessional collaboration including the use of short IPE workshops to semester long IPE courses.

Schneerson et al. (2014) found that a two-day IPE workshop on healthy aging positively impacted healthcare students’ understanding of discipline specific roles and increased their appreciation of an interprofessional approach to client/patient care. Similarly, short case-based IPE workshops with medical and nursing students have been shown to foster interprofessional collaboration and skills to support aging clients in addition to garnering a better understanding of other discipline roles (Thompson et al., 2020). Moreover, McManus et al. (2017) show that a longer IPE course can increase interest in working with aging clients/patients.

IPE integrated with clinical experiences have increased student perceptions of collaborative practice including the value of other disciplines and their contributions to patient care, and increased participation in interprofessional collaboration.

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(Gould et al., 2014). Similarly, Conti et al. (2016), through analysis of student IPE clinical visits with aging clients/patients and post-visit discussions, found participants had increased comfort in learning about and caring for aging clients/patients in addition to enhanced ability to participate in interprofessional collaboration. Additionally, Corlis et al. (2019) found through the completion of a clinical IPE experience students attained increased knowledge and skills in caring for aging clients/patients and a better understanding of their needs.

**Cultural fluency**

Various disciplines include cultural fluency competencies including humility, awareness, sensitivity, and responsiveness in practice—terminology that has evolved from the concept of cultural competence (Fisher-Borne et al., 2015; Isaacson, 2014). Inoue (2007) uses the term cultural fluency to describe cross-cultural communication that includes flexibility, empathy, and adaptability in establishing shared meaning and understanding with others. The increasing diversity of clients/patients demands preparedness of healthcare professionals to consider ecological approaches that integrate family, environment, and culture in order to provide holistic care. IPE has been utilized to facilitate development of cultural fluency. Research indicated that both semester-long IPE courses or activities as well as short-term IPE sessions on have been found to increase student knowledge, attitudes, comfort level and perceived skill with cultural competency (Hawala-Druy & Hill, 2012; Jacomino et al., 2015; Liu et al., 2015).

IPE orientation and curricular activities have been used to develop parallel cultural fluency experiences in practice. Using the collaborative interprofessional team as a context within which to practice cultural fluency, De Oliveira et al. (2015) describe IPE activities that focus on “decentralizing” singular professions as an opportunity to grow cultural fluency skills within the interprofessional team. De Oliveira et al. (2015) indicated that in working with physician assistant and physical therapy students, their learning about one another’s professions, integrating all team member perspectives, and developing a plan that reflects an interprofessional approach, results in practicing the skills that will be used in working directly with clients/patients. The IPE experience integrates client/patient perspectives, values, knowledge, and resources into problem solving or treatment planning.

Similarly, Hamilton (2011) compares the goals of cultural competency training and IPE, suggesting the overlap indicates an opportunity for “interdisciplinary cultural competency” as both ultimately work to improve healthcare outcomes for the client/patient by fostering sensitivity, challenging underlying beliefs/stereotypes, and promoting communication. Students simultaneously learn how to recognize and acknowledge the various perspectives that each profession brings to the team and reduces profession-centricism in professional practice. There is a paucity of literature on the intersection of IPE and care for aging and diverse clients/patients. The purpose of this paper is to describe an interprofessional workshop on aging and to present findings on students’ perceptions of their interprofessional skills, cultural fluency, and preparedness to working with aging clients/patients, as well as on their impressions of participating in the workshop.

**Methods**

The IPE workshop at St Catherine University brings together undergraduate nursing, public health, dietetics, and respiratory care students along with graduate students from social work, physical therapy, physician assistant, and occupational therapy to practice approaches to working with the aging population on interprofessional teams. While this workshop has been in existence for 25 years, recent innovations highlight a multi-faceted focus on IPE, aging, and cultural fluency.

**Logistical structure**

An interdisciplinary planning committee composed of faculty from all represented programs reviews the learning objectives and client/patient case, establishes the agenda for the workshop, and identifies common preparatory readings. In the early years of the workshop, students reviewed and discussed case studies of an elderly client/patient and a young child. Over time the focus of the workshop shifted to the care of aging clients/patients with special attention to cultural fluency. In 2016, the planning committee created an eight-minute video that parallels a case study that students received prior to the workshop. The opening scene of the video shows the discharge of a non-English speaking, aging Hmong woman from the hospital after sustaining an injury from a fall. Her daughter is acting as a translator. Subsequent scenes provide a tour of her home, to allow students to take an ecological approach to assessing the living environment by identifying assets and obstacles or hazards in the home. The video also includes a case conference between a social worker and the two children, allowing workshop participants to gain an understanding of the complexities of navigating differing opinions and desires of family members and clients/patients.

In preparation for the workshop, students read a packet including the case study and selected articles on aging and cultural fluency. Discussion questions prompted students to come ready to consider a variety of perspectives and how they would work collaboratively to care for this client/patient and family. In addition, students were asked to reflect on their perceptions of other disciplines prior to attendance and how those perceptions shifted after the workshop.

On the day of the event, students were assigned to tables with representation from each discipline. Tables without representation from all disciplines were provided a fact sheet describing the missing discipline’s approach to the case. The workshop consisted of an overview of interprofessional collaboration, viewing a case study video, table discussions, and large group discussions regarding the case to create a holistic care plan. Discussion questions prompt students to reflect on the client/patient and family strengths and needs, develop treatment goals, negotiate roles, and create an integrated plan of care. In addition, students examine the impact of culture, language, and beliefs about health care on care planning. Finally, they identify policy opportunities to promote successful aging.

Learning objectives for the event are mapped to the IPEC Core Competencies (IEC, 2016) as they relate to aging, interprofessional collaboration, and cultural fluency and students.
complete a post-workshop survey linked to those objectives (see Table 1). The internally created survey asked students to reflect on their confidence in each of the competency areas pre- and post-workshop.

**Participants**

The eight aforementioned programs within St Catherine University participated in the IPE workshop on aging between 2018 and 2020. Students have varying levels of exposure to interprofessional education and practice prior to participation. An estimated total of 744 student participants were recruited to complete the survey based on attendance. Survey completion was voluntary and anonymous.

**Data collection**

Quantitative and qualitative data were obtained from post-workshop student reflection surveys from the 2018–2020 IPE workshops. All students in attendance were asked to complete an anonymous paper survey post-workshop using a retrospective pre-post approach (Howard, 1980; Yank et al., 2013). Qualitative data provided a more comprehensive understanding of participant responses (Pope & Mays, 2000). Demographic variables included program of study, prior experience in working with older adults, previous participation on interprofessional teams, and prior experience working with clients/patients from another culture. Participants were asked to rate their level of preparedness, pre- and post-workshop, on six items related to interprofessional collaboration, aging, and cultural fluency. Items were mapped to the IPEC Core Competencies (see Table 1).

**Data analysis**

Quantitative data were exported to JASP statistical software for analysis (JASP Team, 2020). JASP (Version 0.12.2) [Computer software]. Descriptive statistics were used to describe the means and standard deviation of responses to each of the six preparedness items. Paired sample t-tests were used to compare the pre- and post-workshop preparedness scores.

To enhance the credibility of the data, triangulation was used to collect data from each discipline participating in the workshop (Hanson et al., 2011). All students received an identical survey containing two open-ended survey questions that were analyzed for recurring themes. Coding was facilitated through the use of a qualitative software program, NVivo 12, v12.6.0.959. QSR International (1999) NVivo Qualitative Data Analysis Software [Software]. Two researchers independently read and coded the responses from the raw data using a constant comparative method, an inductive strategy with no predefined coding criteria or hypothesis to generate initial themes (Kolb, 2012). The researchers used consensus building to establish and align codes related to interprofessional behaviors to the four IPEC Core Competencies (IEC, 2016). All responses were collaboratively coded by both researchers.

| Table 1. Survey items mapped to IPEC core competencies. |
|---------------------------------|-----------------|-------------|
| Item DESCRIBE THE OLDER ADULT'S NEEDS IN THE CASE STUDY IN COLLABORATION WITH OTHER PROFESSIONALS. | IPEC core competency | IPEC sub-competency |
| Demonstrate awareness and modify professional practice according to cultural diversity and differences that characterize patients, populations, and health teams. | Values and Ethics | VE3 |
| Identify the unique cultures, values, roles/Responsibilities, and expertise of other health professions as they relate to developing a team care plan for an older adult. | Values and Ethics | VE4 |
| Recognize one's limitations in skills, knowledge, and abilities during the development of a team-based care plan of an older adult. | Roles and Responsibilities | RR2 |
| Communicate with team members to clarify each member's responsibility in developing components of a care plan of an older adult. | Roles and Responsibilities | RR6 |
| Express one's knowledge and opinions, and actively listen to other team members involved in the creation of a care plan of an older adult. | Interprofessional Communication | CC3 |
| - | Interprofessional Communication | CC4 |

Abbreviated from IEC (2016)

**Ethical considerations**

The St Catherine University Institutional Review Board determined the secondary analysis of this de-identified dataset to be exempt (approval #1412).

**Results**

The dataset for this analysis included survey responses from 629 returned surveys of an estimated 744 participants in the IPE workshop from 2018–2020 representing a response rate of 84.5%.

**Quantitative results**

The largest group of participants were nursing majors (32%), followed by social work (18%), physical therapy (16.1%), occupational therapy (11.1%), and public health (10.7%). The smallest groups were from dietetics (3.7%), respiratory care (4.0%), and the physician assistant program (4.4%). The participants were asked to rate their previous experience working with older adults, with an interprofessional team, and with clients/patients from another culture and/or non-native English speakers. The mean and standard deviation by discipline are reported in Table 2. Approximately 9% of students reported having extensive opportunities to work with older adults whereas about 5% of students reported working with clients/patients from another culture and/or non-native English speakers. Additionally, 94% of students reported at least a few opportunities to work with an interprofessional team, with only about 4% reporting extensive opportunities to work with an interprofessional team.
Table 2. Descriptive statistics for 629 students participating in the IPE workshop from 2018–2020.

| Program                | N (%) | Experience with older adults (mean and SD) | Experience with interprofessional team (mean and SD) | Experience with clients/patients from another culture (mean and SD) |
|------------------------|-------|------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------|
| Dietetics              | 23 (3.7%)  | 2.39 ± 0.78 | 2.22 ± 0.80 | 2.55 ± 0.80 |
| Nursing                | 201 (32.0%) | 3.15 ± 0.72 | 2.85 ± 0.68 | 2.61 ± 0.69 |
| Occupational Therapy   | 70 (11.1%)  | 2.31 ± 0.65 | 2.29 ± 0.60 | 2.30 ± 0.64 |
| Physician’s Assistant  | 28 (4.4%)   | 2.04 ± 0.90 | 2.46 ± 0.74 | 2.54 ± 0.69 |
| Public Health          | 67 (10.7%)  | 2.05 ± 0.87 | 2.02 ± 0.71 | 2.61 ± 0.84 |
| Physical Therapy       | 101 (16.1%) | 2.56 ± 0.56 | 2.23 ± 0.53 | 2.28 ± 0.49 |
| Respiratory Care       | 25 (4.0%)   | 3.16 ± 0.62 | 2.48 ± 0.82 | 2.8 ± 0.76  |
| Social work            | 113 (18.0%) | 1.98 ± 0.95 | 2.66 ± 0.92 | 2.96 ± 0.74 |

Responses were obtained on the following scale: none (1); a few opportunities (2); frequent opportunities (3); extensive opportunities (4)

The post-workshop survey asked students to reflect on their level of preparedness in six areas of interprofessional practice prior to attending the workshop compared to post-workshop. Table 3 displays the mean and standard deviation by survey item, as well as the paired sample t-tests. There was a statistically significant difference in students’ perception of their preparedness across all domains.

Regarding their overall experience, 92% of participants rated the workshop as good or excellent. Application of content was particularly difficult for some non-medical providers such as social work and public health. Additionally, some nursing students felt as though this workshop was placed too late in their program.

Table 3. Pre- and post-workshop self-assessment of interprofessional skills.

| Item                                                                 | Pre-workshop M | Pre-workshop SD | Post-workshop M | Post-workshop SD | t (df) | p     |
|-----------------------------------------------------------------------|----------------|-----------------|------------------|------------------|--------|-------|
| Describe the older adult’s needs in the case study in collaboration with other professionals. | 3.09 | 0.69 | 3.61 | 0.51 | -20.05 (623) | <.001 |
| Demonstrate awareness and modify professional practice according to cultural diversity and differences that characterize patients, populations, and health teams. | 3.00 | 0.71 | 3.51 | 0.53 | -19.80 (624) | <.001 |
| Communicate with team members to clarify each member’s responsibility in developing components of a care plan of an older adult. | 3.09 | 0.73 | 3.63 | 0.51 | -19.63 (624) | <.001 |
| Express one’s knowledge and opinions, and actively listen, to other team members involved in the creation of a care plan of an older adult. | 3.36 | 0.65 | 3.70 | 0.47 | -13.79 (622) | <.001 |
| Recognize one’s limitations in skills, knowledge, and abilities during the development of a team-based care plan of an older adult. | 3.15 | 0.68 | 3.59 | 0.51 | -18.05 (625) | <.001 |
| Identify the unique cultures, values, roles/responsibilities, and expertise of other health professions as they relate to developing a team care plan for an older adult. | 2.93 | 0.74 | 3.53 | 0.53 | -22.09 (625) | <.001 |

Responses were obtained on the following scale: not at all prepared (1); somewhat prepared (2); prepared (3); highly prepared (4)

Qualitative results

From the same survey of 629 students across all disciplines, there were a total of 575 students who provided 874 discrete comments on one or both open-ended survey questions. In addition to providing descriptive data regarding the logistics of the event, the qualitative responses allowed exploration of factors that contributed to the interprofessional experience. An additional theme related to workshop logistics emerged from the data. Table 4 describes the themes and codes.

Aging

In addition to the quantitative results related to perceptions of preparedness to work with aging clients/patients, student qualitative responses highlighted the awareness of individualized and holistic care planning. Some students specifically mentioned creating a plan of care for the case or discussed the need to coordinate all care for the benefit of treating the aging person as a whole. The mentioning of the care planning occurred nearly 10% of the time by 57/575 participants. The following comments best characterize these responses: “We learned from each other, especially how each person contributes to elderly care” (participant 238), “Each member’s voice was heard and the input for their profession was carefully considered and integrated in the care plan” (participant 48).

Table 4. Themes and codes.

| Theme                          | Code                                |
|--------------------------------|-------------------------------------|
| Aging                          | Aging Culture                      |
| Cultural Fluency               | Additional Aspects of Cultural Fluency |
|                                  | Role Clarity                        |
|                                  | Appreciation of Other’s Roles       |
|                                  | Respectful and Open Expression      |
| Interprofessional Competencies  | Career Preparation                  |
|                                  | Collaboration                       |
|                                  | Unprofessional Behavior             |
|                                  | Variable Participation              |
|                                  | Workshop logistics                  |
| Operational Suggestions         | Balance of professions              |
|                                  | Preparation                         |
|                                  | Student fit                         |
|                                  | Preparation                         |
Cultural fluency
The responses related to the theme of cultural fluency highlighted students’ awareness of the importance of culture in practice. This included responses that specifically integrated the terminology of “culture” and others that illustrated the concept of cultural fluency in various ways.

Culture. While this was infrequent with only 7 out of 575 participants specifically naming culture as a factor in their comments. The following comments illustrate the specific ways in which students noted culture being integrated into the group discussion: “I think we all approached the case holistically with cultural sensitivity” (participant 14), “Everyone spoke, had opinions, and contributed new ideas to the topic and how their career with manage the case and help this family in the best way that addresses culture, safety, medicine, health, and much more” (participant 192), and

Everyone was eager to share and learn. All members provided vital viewpoints and knowledge. It was helpful to connect how we would all work together to give the patient optimal care that addresses the person as a whole including her physical, mental, functional, and cultural well-being and health. (participant 418)

Additional aspects of cultural fluency
The following codes highlight various skills of cultural fluency without specifically naming culture as an indicator. Drawing upon the framework of Hamilton (2011) paralleling cultural competency and IPE training outcomes including fostering sensitivity, challenging underlying beliefs/stereotypes, and promoting communication, the following themes were identified.

Role clarity. This code includes responses related to teaching or learning about a discipline’s unique role within healthcare or related to the client/patient case. Students described gleaning a better understanding of an unfamiliar discipline’s role and scope, or generally reported the ability to educate others on their discipline and offer a unique perspective given their education. Over 20% of students remarked on this code (120/575).

The following quote describes the students’ ability to represent their own professions in the case conversation: “Each discipline added a lot of insight into how each profession would add to the plan of care and coordinate with each other to ensure we were covering all of the bases” (participant 40). Students expressed appreciation for the opportunity to dispel others of preconceived ideas regarding their profession: “It was great being able to share my role on the team as a healthcare provider and helping to clarify misconceptions, answer questions, and simply provide information about my role on a team of healthcare individuals” (participant 419). A few students described confusion regarding the role of social workers and public health professionals on a healthcare team, which was not resolved during the workshop: “Our team had a hard time distinguishing social work and public health. Social work can work in communities and policy as well, but how they are different in these settings and together was unclear to them” (participant 506).

Appreciation of other’s roles. This code emerged as one of the most frequent codes with nearly 20% of students reporting a new appreciation of providers from other disciplines (112/575). Comments captured the appreciation of their experiences working together and learning from each other, such as the following examples: “Hearing other’s perspectives was very educational. Recognizing that others have better/more skills than myself in certain situations was important. Healthcare would be impossible without all these disciplines” (participant 428).

This was a valuable experience to really gain an understanding of the scope of many other professional’s practices. It is always humbling to gain perspective from others because everyone has information/knowledge to offer, and I will be a better provider because of this experience! (participant 430)

The overlap of roles among healthcare providers emerged. Respondents described overlapping scopes of practice and alignment of job requirements among disciplines. There were comments from about 4% of students reported for this theme (24/575). These are best outlined in the following quotes: “It was cool to see the extent of overlap between all of our professions and how important it is to take an interprofessional team approach to provide quality, well-rounded care to the patients” (participant 30); and, “We discussed our roles, but also found how integrated within our roles we are. There is a large overlap in job requirements and we are all seeking the same positive outcomes” (participant 65).

Respectful and open expression. This code includes responses in which students described an ability to freely express themselves, an openness to the remarks of others, an equal sharing of perspectives and resolution of minor disagreements. Nearly 50% (284/575) of students commented on this category making it the most reported code. A few narratives from students represent this theme best: “Everyone was thorough in question asking and very engaged. We communicated well and each always brought something new to the table” (participant 69); and, “Everyone participated with open minds and respectful disagreement/expression of various views” (participant 125). There were occasional comments in this code related to a lack of depth, moments of silence, or difficulty staying on task illustrated through these quotes: “We had good discussions but sometimes got off track – although our tangential conversations were good about our role in medical teams” (participant 170); and, “Everyone contributed to the discussion and had meaningful information to add. There were moments of silence, but it usually led to one of the more reserved members speaking up. So overall it was a good thing” (participant 549).

Interprofessional competencies
The following themes emerged as relevant to IPE competencies and skills. They represent both experiences related to collaboration as well as comments regarding career preparation.
Collaboration
Responses in this code describe teamwork, the ability to build off each other’s ideas, or greater depth of conversation regarding the case. Collaboration and teamwork were mentioned by almost 15% of all students (86/575) and is best reflected in the following quotes:

We communicated our concerns and goals clearly and many of our concerns/goals aligned. We were able to bounce a lot of different ideas off of each other and came up with ideas that we likely wouldn’t have come up with on our own. (participant 453)

Only one participant expressed an example of poor group collaboration: “We each took our turn to speak and contribute, but we rarely built on each other’s responses and had a collaborative discussion. I didn’t feel that we connected exceptionally well. But we did interact cordially and professionally” (participant 572).

Career preparation
Approximately 4% (22/575) of students specifically mentioned that the workshop helped prepare them for their future career or that it was helpful for their professional growth or development.

This was a valuable experience to really gain an understanding of the scope of many other professional’s practices. It is always humbling to gain perspective from others because everyone has information/knowledge to offer, and I will be a better provider because of this experience! (participant 430)

Other program specific comments related to feeling as though the workshop did not apply to them for various reasons. Application was particularly difficult for some non-medical providers such as social work and public health. For example, not all social work students saw the value of a medical case focused workshop: “I found this activity challenging as a social worker student working on foundation level course work. A lot of the content was so hospital/healthcare focused that at times it was difficult to engage in conversation without that context” (participant 511).

Discussion
Findings from this study contribute to IPE scholarship regarding student perceptions of interprofessional collaboration and the intersection of caring for aging and diverse clients/patients. Consistent with previous research, students reported increased role clarification, appreciation for other disciplines and perspectives, communication skills, and preparation for work with diverse populations (Hawala-Druy & Hill, 2012; Temple & Mast, 2016; Wharton & Burg, 2017). There is limited research indicating that short IPE interventions create impactful and sustained change (Liu et al., 2015). However, this study suggests that short IPE interventions can result in increased perceptions of preparedness in interprofessional collaboration.

The IPE workshop focused on preparing for practice with aging adults with diverse cultural identities. Students reported an increased perception in their ability to describe the needs of older adults, share knowledge from their discipline in developing a care plan, and clarifying the role of their discipline in caring for aging clients/patients. This aligns with previous research demonstrating increased knowledge and enhanced collaborative practice in supporting healthy aging of clients/patients (Schneerson et al., 2014). Similar to findings from Corlis et al. (2019), this IPE workshop focused on a geriatric case that elicited increased student perceptions of working collaboratively and ability to care for aging clients/patients. Additionally, this study built on a recommendation from Schapmire et al. (2018) to overcome barriers through IPE and caring for aging clients/patients by ensuring equal representation of healthcare-related disciplines in IPE.

Building on Schneerson et al.’s (2014) research, this IPE workshop integrated a holistic approach to care with an emphasis on cultural fluency. The findings indicated that in doing so, students participated in a workshop that simultaneously engaged them in the development of interprofessional and cultural fluency skills as suggested by Hamilton (2011) and reported a significant increase in their perception of their preparedness for culturally fluent practice.

The authors’ findings add to the paucity of literature on IPE and the intersection of caring for aging and diverse clients/patients, showing that a short IPE workshop is feasible in enhancing student perception of preparedness in working with aging and diverse clients/patients. Short-term IPE activities provide the opportunity for disciplines that don’t get as much exposure through their discipline-specific coursework to engage in interprofessional collaboration.

Limitations
A limitation of this study is the lack of a control group, students who did not attend the IPE workshop, to compare findings with students who attended the workshop. Additionally, there is no longitudinal data to assess if findings are sustained once students have transitioned to practice. Moreover, there is no baseline data and the self-created survey used to measure students’ perceptions pre- and post-workshop was not validated. Finally, given the anonymous nature of the survey, themes could not be reviewed for accuracy with participants to strengthen the dependability of the qualitative findings.

Recommendations
Based on the findings from this IPE initiative, the authors indicated the following recommendations or considerations for development of an effective IPE workshop. When developing an IPE workshop, use of an existing framework such as the IPEC Core Competencies to align assessment instruments and workshop objectives is important in obtaining meaningful data. Other recommendations were gleaned regarding student participation. Ensure student workgroups have consistent representation across disciplines to foster robust discussion or use another means to share information not represented such as a factsheet. Engage all students who are at varying points in their programs and at different levels of experience by providing more complex questions or discussion prompts for those who have more experience on interprofessional teams. Additionally, actively engage students who may not be interested in careers in healthcare settings to enrich the discussion and highlight the transferability of interprofessional values and skills. Continue to
develop opportunities to build students’ cultural fluency by explicitly connecting IPE competencies and cultural fluency skills. Acknowledging this parallel and naming that they are not only preparing for future practice but actively engaging in practicing these skills through participation in the IPE workshop may bolster their perception of preparedness for practice.

Finally, scheduling is a common challenge for IPE events, as it can be difficult to find time in packed curricula. Selection of an event date a year in advance provides sufficient notice to participating programs to enhance capacity for all to participate. Additionally, time commitment for faculty is not always recognized or compensated. A dedicated planning committee helps sustain an on-going annual event and should be compensated or recognized as university service.

This IPE workshop is replicable and can be adapted to meet the needs of a variety of interprofessional groups. Building a case study that reflects aging, cultural fluency, and relevant competencies that align with the work of an interprofessional team will provide a foundation for the workshop. Finding and developing supplementary learning materials such as articles, role plays, mock charts, and videos will provide depth to the case and enhance the learning experience. Finally, creating discussion questions that mirror the dialogue and teamwork that takes place in practice will help students apply the knowledge of interprofessional practice, aging, and cultural fluency.

Opportunities for further research might include a more robust assessment of aging and cultural fluency with use of validated assessment tools. Additionally, use of focus groups or individual interviews could enhance the depth of qualitative data obtained. Finally, the collection of longitudinal data would provide information regarding the length of impact.

Conclusion

Through quantitative and qualitative methods, the authors examined student perceptions on preparedness for practice in relation to interprofessional collaboration, aging, and cultural fluency. The quantitative findings from the survey suggest that the IPE workshop had a statistically significant impact on students’ self-perception of their preparedness to practice on interprofessional teams, with older adults, and with team members and clients/patients from cultures other than their own. The qualitative analysis obtained from survey data identified key factors that contributed to student interprofessional experience in addition to aging and cultural fluency. These findings align with the IPEC Core Competencies with an additional theme of operational suggestions and offer recommendations for conducting effective IPE workshops.

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Data Availability Statement

The data that support the findings of this study are available from the corresponding author, [CW], upon reasonable request.

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