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Faculty Members' Perceptions of Organizational Culture and Implementation of Interprofessional Education

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This is to certify that the doctoral study by

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MSN, Angelo State University, 2008

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Project Study Submitted in Partial Fulfillment

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Abstract

A disparity exists between what is known about the benefits of interprofessional education (IPE) and implementation of IPE at the university under study. The World Health Organization called on institutes of higher education to provide IPE in the education of health professionals to improve the healthcare workforce's capacity to provide quality care. The purpose of this qualitative study was to understand the perceptions of health professions faculty members (HPFMs) about IPE and how those perceptions might be influenced by the organizational culture at the site. Informed by Hofstede's dimensions of culture theory, the research questions addressed HPFMs' understanding of and attitudes about IPE, their perceptions about the organizational culture, and their perceptions about how the organizational culture has affected IPE implementation at the site. Eight semistructured qualitative interviews were conducted and results were analyzed using in-vivo and values coding. Five themes emerged (a) divergent vision, (b) sporadic support, (c) educational silos, (d) IPE influencers, and (e) strong service ethos. Findings led to the creation of a white paper in which three recommendations were made to help the site implement IPE: (a) create an IPE implementation team to lead the change; (b) provide IPE training for faculty, staff, and administrators to facilitate preparation; and (c) use service-learning to link IPE to the strong cultural service ethos. This research study contributes to positive social change by enhancing the university's capacity to prepare collaborative practice-ready health professions graduates who can provide higher quality and safer patient care and who will be more satisfied by their work.

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Dedication

This project is dedicated to my family and friends, who have put up with my frequent “Sorry, I’m busy” responses for the past three years. I am looking forward to reconnecting without the distraction of thinking about writing the next chapter.

Acknowledgments

I would like to thank my sister, Charlene. She helped open my mind to the potential of a qualitative study and then listened, reflected, and provided feedback throughout the process. I would also like to thank my fellow faculty members who encouraged me to push through when frustrated and who asked thoughtful questions about my work. Finally, I would like to thank my doctoral chair, Dr. Katherine Garlough. Her insight and encouragement helped guide me through this very arduous process.

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Section 1: The Problem

The Local Problem

Although the benefits of interprofessional education (IPE) are well documented, health professions faculty at a private university in a large southwestern city in the United States had not implemented a sustained IPE program. A senior administrator at the university acknowledged that IPE was "not going away" and said that the university needed to develop a sustained program to optimize health professions education (senior university administrator, personal communication, April 2, 2019). Further, community and national health agencies considered IPE implementation at the site when determining if the university would be a good academic partner (senior university administrator, personal communication, April 2, 2019). The problem was that organizational culture was influencing IPE implementation at the research site (Faculty Member A, personal communication, February 14, 2018; Faculty Member B, personal communication, December 5, 2018; senior university administrator, personal communication, April 2, 2019; program chair, personal communication, April 15, 2019; sponsored programs administrator, personal communication, May 13, 2019). The university had identified and begun to address logistical challenges to IPE, such as coordination of academic calendars and multiple campuses, but had not developed a collaborative culture among the health professions schools (senior university administrator, personal communication, April 2, 2019). A previous grant-funded IPE activity involved only graduate-level students, and a recommendation to involve students in IPE earlier in their training was dismissed due to the reported need that students learn about their own professional cultures before learning

about those of others (Faculty Member A, personal communication, February 14, 2018). Faculty members in the health professions schools came from cultures where they worked within their own groups with little interprofessional collaboration, and most had not embraced IPE efforts (sponsored programs administrator, personal communication, May 13, 2019).

The World Health Organization (WHO; 2010) defined *IPE* as activity in which "students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (p. 10). Although successful programs introduce IPE concepts early; incorporate the WHO expectations of learning with, from, and about each other; scaffold the activities across the curriculum; and require participation, other programs address IPE as an optional activity, offer isolated events that are introduced too late in the curriculum to promote positive interprofessional attitudes, or falsely categorize parallel multiprofessional activities as IPE (Brewer, Flavell, Trede, & Smith, 2018; De Vries, Reuchlin, de Maaijer, & van de Ridder, 2017; Frantz & Rhoda, 2017; Homeyer, Hoffmann, Hingst, Oppermann, & Dreier-Wolfgramm, 2018; Institute of Medicine [IOM], 2015; Ketcherside, Rhodes, Powelson, Cox, & Parker, 2017; Konrad, Cavanaugh, Rodriguez, Hall, & Pardue, 2017; Maree et al., 2017; Van Kuiken, Schaefer, Flaum-Hall, & Browne, 2016). Working with other healthcare workers, where group members agree to use their own skill sets, does not constitute collaborative practice (WHO, 2010). Instead, collaboration requires communication between practitioners, resulting in shared knowledge not gained without the interaction (WHO, 2010).

Of the five health professions schools at the university under study, four offer graduate-level programs, including optometry, osteopathic medicine, pharmacy, and physical therapy. The school of nursing and health professions serves undergraduate and graduate level students in athletic training, kinesiology, nuclear medicine, nursing, and rehabilitative science programs. Traditionally, each school operated independently of others with little routine collaboration (senior university administrator, personal communication, April 2, 2019). The health professions schools were located on five separate campuses, and outside of annual schoolwide meetings, health professions faculty from each school did not routinely meet with those from other schools. Student activities were also isolated, with each group staying largely on its designated academic campus.

A previous grant to promote IPE at the university supported temporary IPE activities, but once the grant ended, the IPE effort was not continued (Faculty Member A, personal communication, February 14, 2018). Since then, efforts at IPE have been met with resistance from both faculty and administrators (Faculty Member B, personal communication, December 5, 2018). A few faculty members at the university continued to schedule events with students from multiple programs, but students mostly worked in parallel groups at those events with little interprofessional collaboration (Faculty Member B, personal communication, December 5, 2018; senior university administrator, personal communication, April 2, 2019). Despite the original grant and ongoing isolated faculty efforts to develop a collaborative culture, an IPE program had not been conclusively established (program chair, personal communication, April 15, 2019). A strategic planning consultant for the nursing department at the university stated that IPE was “a big

national priority and will continue to be" (university consultant, personal communication, April 15, 2019). During a faculty feedback session with the consultant, IPE development was identified by faculty as both a weakness and an opportunity (university consultant, personal communication, April 15, 2019).

Some challenges for IPE are quickly identified, whereas others such as organizational culture are intertwined and more difficult to isolate. Organizations should explore potential barriers at the macro (government and regulatory practice), meso (institutional organization and leadership), and micro (individual faculty and student member issues) level to determine where problems lie and how to best address them (Grymonpre et al., 2016). Once barriers are identified, they are more easily addressed.

Many organizations struggle to implement IPE in education and in practice in the United States and internationally. The National League for Nursing (NLN; 2015) identified a nationwide lag in the implementation of IPE in health professions schools. Mladenovic and Tilden (2017) said few institutions of higher education have implemented meaningful and sustained IPE and that "programmatic silos remain the norm" (p. 10). Frantz and Rhoda (2017) described a gap between the conceptualization of IPE and the operationalization of IPE, resulting in a lack of sustained implementation at a South African university. Grymonpre et al. (2016) said, though there is widespread support for IPE initiatives, institutions of higher education struggle with sustained implementation. Even if IPE is implemented within academic programs, the lack of a collaborative practice culture in clinical affiliate organizations offers few opportunities for students to transfer their learning to the real world (Brewer et al., 2018). Although

some academic institutions have successfully implemented IPE programs, widespread and sustained IPE implementation remains elusive.

Rationale

Lack of IPE implementation at the university puts its health professions students and those who they care for at a disadvantage (see De Vries et al., 2017). IPE provides opportunities for health professions students to learn together in anticipation of practicing together and is widely recognized as a necessary component of healthcare curricula (Stanley & Stanley, 2019). There are multiple benefits of IPE, but improved patient safety is a key goal for IPE implementation. Healthcare provided by professionals who are "collaborative practice-ready" is more likely to result in improved patient outcomes (WHO, 2010, p. 7). Asirvatham, Foy, and Laack (2019) said 70% of adverse patient events could be avoided by implementing and maintaining an IPE program. NLN (2015) stated that IPE improves patient safety, reduces healthcare costs, improves patient satisfaction, and should be included in all nursing curricula. Another benefit of IPE is that collaboration results in overlapped competencies that strengthen the team (Asirvatham, Foy, & Laack, 2019). Teams that practice collaboratively are better able to manage clients with complex health conditions (Teodorczuk, Khoo, Morrissey, & Rogers, 2016). Health professions graduates who participate in IPE in their curriculum are more confident in team roles upon graduation (Pfaff, Baxter, Jack, & Ploeg, 2014).

Researchers have identified multiple reasons for failed IPE implementation, but the problem persists for many schools of health professions. Organizational culture has been recognized by many as a challenge to IPE implementation (Asirvatham et al., 2019;

Brewer et al., 2018; Latta, 2015; Maree et al., 2017; Mladenovic & Tilden, 2017; Sand & Osgood, 2016; Schrapmire et al., 2018; Stanley & Stanley, 2019). NLN (2015) cited persistence of training silos, incongruent curricula, high faculty workload, and professional centric culture as significant barriers to implementation. Brewer et al. (2018) said structural, cultural, and economic obstacles inhibit IPE implementation resulting in IPE activities that are isolated, poorly organized, and lacking substance. Gilbert, Veesenmeyer, and Limon (2019) said that traditional culture was the biggest obstacle for IPE and described overcoming existing habits and traditions as a daily struggle. When queried about barriers to IPE, simulation specialists identified top problems as a lack of resources, a lack of organizational support, and a resistant culture (Asirvatham et al., 2019). The continued failure of health professions programs to implement and sustain IPE could result in inadequate preparation of university graduates, could adversely affect the reputation of university health professions programs, and could ultimately result in reduced quality of healthcare provided by university graduates. There may be many barriers to IPE implementation at the university—including lack of resources, lack of organizational support, and conflicting schedules—but for this study, I focused on faculty members' perceptions about IPE and how they were influenced by organizational culture. The purpose of this qualitative study was to understand the perceptions of health professions faculty members (HPFMs) about IPE and how those perceptions might be influenced by the organizational culture at the university under study.

Definition of Terms

Buy-in: "An individual cognitive and behavioral activity related to an employee's commitment to a specific change effort that exists on a continuum from denial to resolution" (Mathews & Crocker, 2016, p. 85).

Clinical affiliate organizations: Healthcare facilities or organizations that work with academic institutions to facilitate practical education for health professions students (Washington State Department of Health, 2018).

Cultural change: A change in mindset that results in a change in practices and values among a group or category of people (Hofstede, Hofstede, & Minkov, 2010).

Cultural shift: Cultural shift and cultural change will be used interchangeably.

Interprofessional education (IPE): "Students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (WHO, 2010, p. 10).

Organizational culture: "A structured system in which individuals come together as a group in order to achieve a common goal" (Buller, 2015, p. 11).

Health professional: Those who maintain health in humans through the application of the principles and procedures of evidence-based medicine and caring (WHO, n.d.).

Health professions: Those who: (a) maintain human health through the application of evidence-based care; (b) prevent and treat human illness, injury, or mental impairment; (c) apply preventive or curative measures to promote and positive health

outcomes; and (d) conduct research to advance evidence-based healthcare (WHO, 2013, Annex I).

Significance of the Study

Health professions programs face the ongoing challenge of keeping up with evolving healthcare practices. The cultures of academic organizations are different from business or military organizations, requiring a different approach to change (Buller, 2015). Further, each academic institution is unique in its structure, relationships, priorities, and history (Bolman & Deal, 2014). Academic reform relies on a critical understanding of organizational culture (Bajis, Chaar, Basheti, & Moles, 2018). The problem addressed in this study is that organizational culture was influencing IPE implementation at the site. The significance of this study is that once perceptions are identified, institutional leaders can address cultural barriers and facilitators for the implementation of a sustainable IPE program. Building on existing cultural attitudes that support IPE would create a stronger foundation for implementation by tying current values to IPE initiatives. Identifying and exploring attitudes that create barriers to IPE would help leaders clarify misconceptions and promote the benefits of IPE that are supported by evidence. Understanding HPFMs' perceptions about IPE implementation and how they might be influenced by organizational culture could contribute to positive social change by increasing the university's capacity to implement and sustain an IPE program. Successful implementation of an IPE program could help produce healthcare professionals who practice collaboratively, provide higher quality and safer patient care, and are more satisfied with the work that they do.

Research Questions

In this study, I explored HPFMs' perceptions about IPE and how those perceptions might be influenced by the organizational culture at the university under study. Breslin, Nuri-Robins, Ash, and Kirschling (2018) said cultural bias prevents people from understanding why systems must change, and that bias has the potential to stop programs before they start. Professional cultural values of healthcare providers, educators, and learners can act as enablers or barriers to implementation (Grymonpre et al., 2016). It is essential to know which cultural dimensions are preventing implementation of IPE and which cultural dimensions may facilitate IPE adoption in health professions curricula. The research questions for this study were:

RQ1: How do HPFMs at the research site define IPE?

RQ2: How would HPFMs at the research site describe their attitudes toward IPE?

RQ3: How do HPFMs at the research site describe the organizational culture?

RQ4: How do HPFMs at the research site describe how organizational culture affects the implementation of IPE?

Understanding the perceptions of the university HPFMs would help identify individual and organizational priorities and values that could act as barriers to or facilitators of IPE. Knowing this information in advance could help the university develop effective strategies for IPE implementation and foster enthusiasm (Haque, TitiAmayah, & Liu, 2016).

Review of the Literature

The purpose of this qualitative study was to understand HPFMs' perceptions about IPE and how they might be influenced by the organizational culture at the university under study. Understanding faculty members' perceptions could help organizational leaders determine which cultural dimensions could inhibit implementation of IPE and which cultural dimensions could facilitate IPE adoption in health professions curricula at the site.

The review of literature for this qualitative research included three areas (a) explanation of Hofstede's dimensions of culture theory, (b) a history of the development and adoption patterns for IPE, and (c) a discussion of organizational culture related to change. I searched the university and Walden library databases (CINAHL, EBSCO, Education Source, ERIC, Medline, Social Sciences Citation Index) for peer-reviewed articles dated 2015–2019 using the following keywords: *change culture, change leadership, change management, collaboration, collaborative practice, curriculum, health professions education, higher education, interdisciplinary, interprofessional education, interprofessional learning, nursing education, organizational culture*, and *teamwork*. Additionally, I searched the literature resource sections of professional healthcare organizations associated with IPE training including the NLN, the International Nursing Association for Clinical Simulation and Learning (INACSL), the Society for Simulation in Healthcare, the Robert Woods Johnson Foundation, and the Interprofessional Education Collaborative (IPEC). I also used selected Google Scholar resources.

Conceptual Framework

The conceptual framework for this qualitative research was Hofstede's dimensions of culture theory. There are many definitions of culture, but for this discussion, I used Hofstede et al.'s (2010) definition: Culture is "the collective programming of the mind that distinguishes the members of one group or category of people from others" (p. 6). Culture is not a static phenomenon but changes with experiences. Hofstede et al. (2010) described culture as a layered phenomenon, much like an onion, with outer layers (practices) that are easily observed and change often and deeper, persistent layers (values) that change slowly and may not be readily identified. Experiences that occur early in life tend to create more deeply ingrained, permanent values and typically revolve around family, whereas experiences encountered later are more tied to group identity and involve shared symbols, heroes, and rituals that are more transient depending on changes in group membership (Hofstede et al., 2010). Over the lifespan, one has membership in multiple groups. As individuals become members of groups, each group contributes to their cultural identities (Hofstede et al., 2010). For example, the cultural identity of a university faculty member would be influenced by family composition, nationality, region, ethnicity, religion, gender identity, age, income, education, profession, and workplace. Although nationality may exert the most potent influence, time spent in the profession and the workplace would significantly contribute to the cultural identity (Hofstede et al., 2010).

Group membership influences cultural identity, but culture also influences an organization. Organizations are comprised of individuals who are part of national,

cultural, social, and professional societies and are consequently influenced by the values of those societies (Hofstede et al., 2010). The collective values of a society can create barriers to or facilitate organizational change, influencing human resource policy, the structural makeup of the organization, or political climate (Bajis et al., 2018; Bonello, Morris, & Muscat, 2018; Stanley & Stanley, 2019). Hofstede et al. (2010) identified six dimensions of culture that influence an organization's response to change (see Table 1).

Table 1

Hofstede's Dimensions of Culture

Dimension	Acronym	Definition
Power-distance index	PDI	The degree of inequality within the society or organization and the acceptance of the uneven power distribution.
Individualism versus collectivism	IND	The degree to which the interest of the individual prevails over the interest of the group.
Masculinity versus femininity	MAS	How gender role patterns are defined and overlap within the society or organization.
Uncertainty avoidance	UAI	The extent to which members of the group feel threatened by the new or unknown.
Long-term orientation	LTO	The tendency to which members of the group foster virtues to the future instead of the past or present (short-term orientation).
Indulgence versus restraint	IVR	The tendency to allow gratification of basic and human pleasures to enjoy oneself compared to the tendency to curb gratification

Source: Hofstede et al., 2010.

Depending on the values and norms of the culture, Hofstede's dimensions of culture have varied levels of importance within a group. An organization is scored on a

scale of zero to 100 for each dimension, depending on the degree to which the dimension influences the culture (Hofstede et al., 2010). How the group scores can affect the organization's capacity to change. Organizations with high power-distance index (PDI), individualism versus collectivism (IND), masculinity versus femininity (MAS), uncertainty avoidance (UAI), and indulgence versus restraint (IVR) scores are less likely to change, whereas groups with high long-term orientation (LTO) scores are more likely to change (Bajis et al., 2018; Berger et al., 2017; Bonello et al., 2018; Verma, Griffin, Dacre, & Elder, 2016).

By exploring the perceptions of HPFMs about IPE and how culture influences implementation of IPE at the university, I investigated how selected cultural dimensions, as defined by Hofstede, could facilitate or inhibit implementation of IPE at the study site. Interview questions addressed Hofstede's cultural dimensions related to the overall research questions about culture and IPE adoption. In the analysis, I explored the prevalence of Hofstede's cultural dimensions within the organization that could facilitate change and those that could inhibit change.

Review of the Broader Problem

Interprofessional education. Advances in technology and specialized healthcare practice have resulted in increasingly complex healthcare environments that can result in breakdowns in communication, increased potential for error, and eventual patient harm (Konrad et al., 2017). A century ago, a healthcare encounter typically consisted of a visit between the patient and the doctor and might have included participation from a nurse and a pharmacist. Although the patient's problem might have been complex, lack of

technology and lack of specialized medical knowledge kept the relationship and procedures simple and channels of communication within a small circle. Fewer treatment options resulted in lower life expectancy, and although a disease might have had an effect on other systems, those problems might not have been detected before the patient succumbed to the original disease. Over the past several decades, a proliferation of diagnostic and therapeutic options has contributed to a patient population with increased longevity, increased complexity of health problems, and increased incidence of chronic health problems (Konrad et al., 2017). In modern times, the same patient problem is likely to result in encounters with multiple healthcare professionals across multiple environments and is likely to be addressed by a healthcare team instead of an individual (Steven et al., 2017). For example, a patient with diabetes might initially see a primary care provider, a nurse, a dietician, and a pharmacist. Depending on how the diabetes is managed, it could affect other systems such as vision, heart function, kidney function, sensation, mobility, and more. The patient would then seek the care of an ophthalmologist, a cardiologist, a nephrologist, a neurologist, an orthopedic surgeon, and a physical or occupational therapist to monitor or treat related conditions. This complex network of environments and the larger team it requires result in a high potential for miscommunication, error, and consequent harm to the patient (Konrad et al., 2017). Increasing poverty and social inequity have also resulted in growing healthcare disparities (Konrad et al., 2017). Challenges related to poverty threaten the continuity of healthcare for disadvantaged populations and the need for collaboration is increased (Konrad et al., 2017).

The IOM (1999) described an unacceptable rate of error and patient harm in American healthcare and identified teamwork as an essential component to promote safe patient care. The report challenged healthcare providers and professional schools to develop ways of working together to reverse the trend (IOM, 1999). A decade later, the WHO (2010) identified continued fragmentation of healthcare systems resulting in ongoing unmet needs of recipients, especially in disadvantaged populations. The WHO identified IPE as an intervention that could help produce a "collaborative practice-ready health workforce" (WHO, 2010, p. 7), resulting in improved healthcare outcomes and called for organizations to develop IPE programs, especially in the educational sector. In response to these calls for action, members from six health professions disciplines (dentistry, nursing, medicine, osteopathic medicine, pharmacy, and public health) formed the IPEC with the goal of building a culture of collaborative practice that allows healthcare professionals to build upon each other's strengths and move out of profession-centric boundaries to engage students interactively (IPEC, 2011, 2016). The IPEC developed a set of Core Competencies for Interprofessional Collaborative Practice, which focused on values and ethics, roles and responsibilities, interprofessional communication, and teams and teamwork (IPEC, 2011). The original IPEC member groups also formed the Health Professions Accreditors Collaborative (HPAC) with the goal of promoting collaboration through the inclusion of IPE activities in schools of health professions (HPAC, n.d.). In 2016, the IPEC updated its core competencies with the aim to reaffirm the value of the original competencies, reframe the competencies within a single domain of interprofessional collaboration, and broaden the competencies to better achieve the

triple aim of improved patient care experience, improved population health, and reduced per capita healthcare cost (IPEC, 2016). Between 2011 and 2016, the IPEC supported research projects, developed and facilitated multiple IPE training programs, and welcomed nine additional professional organizations to its ranks (IPEC, 2016).

Despite the availability of support and evidence that collaborative practice results in improved patient care outcomes, implementation levels lagged behind expectations in the U.S. and around the world (Alfies, Rutherford-Hemming, Schroeder-Jenkinson, Lord, & Zimmerman, 2018; Brewer et al., 2018; Homeyer et al., 2018; Krueger, Enstmeyer, & Kirking, 2017; Lestari, Yuliyanti, Rosdiana, Surani, & Luailiyah, 2017; Maree et al., 2017; NLN, 2015; Van Kuiken et al., 2016; West et al., 2016). Barriers to IPE adoption include logistical issues, lack of knowledge, lack of support and resources, regulatory/accreditation incompatibilities, and resistant attitudes (Al-Quatani, 2016; Beck-Dallaghan, Hultquist, Nickol, Collier, & Geske, 2018; De Vries et al., 2017; Lestari et al., 2017; Mladenovic & Tilden, 2017; Sand & Osgood, 2016; Schrapmire et al., 2018; Sollami, Caricati, & Mancini, 2018; Van Kuiken et al., 2016; West et al., 2016).

Logistical challenges for IPE include distant physical environments, incongruent calendars, siloed curricula, and limited community practice environments (Krueger et al., 2017; Mladenovic & Tilden, 2017; Schrapmire et al., 2018; West et al., 2016). At the macro level, accreditation mandates and professional boards may restrict IPE activities (Stanley & Stanley, 2019). For example, a board of nursing may dictate that only a nurse may teach certain skills. More recently, the development of top-down policy supporting IPE and participation of accrediting agencies in collaborative efforts have reduced issues

at this level, but regulatory barriers persist (De Vries et al., 2017; Grymonpre et al., 2016; IPEC, 2016).

Academic institutional policies continue to support isolated experiences for health professions students (Van Kuiken et al., 2016). Students from varied health professions programs may live and study on different campuses miles apart. Schedules may be on different academic calendars, making it difficult for students from different programs to come together for IPE activities. Clinical activities might occur in different environments resulting in few opportunities for collaboration. On the faculty side, offices may be clustered by profession, assignments may be restricted to courses taught in the "home" school, and because of teaching schedules that support varied academic calendars, faculty from different disciplines have few opportunities to interact and develop IPE activities (De Vries et al., 2017; Mladenovic & Tilden, 2017). Many of these challenges were present at the site. Students attended classes on five different campuses and typically encountered only the faculty members who taught on their home campuses. Undergraduate nurses were on a different academic calendar from the rest of the health professions, and clinical activities provided few opportunities for students to collaborate. Though logistical challenges are more easily identified, they may be difficult to overcome (Grymonpre et al., 2016; Homeyer et al., 2018; Lestari et al., 2017; Mladenovic & Tilden, 2017; Roslan, Yusoff, Rahim, & Hussin, 2016; Sand & Osgood, 2016; Schrapmire et al., 2018).

Lack of knowledge related to IPE also inhibits adoption and sustainability and tends to occur at the micro-level. Knowledge issues include misperceptions about what

constitutes IPE, lack of training on how and when to implement IPE, and faculty member discomfort with teaching outside their comfort zones (Alfies et al., 2018; Berger et al., 2017; De Vries et al., 2017; Frantz & Rhoda, 2017; Homeyer et al., 2018; Ketcherside et al., 2017; Mladenovic & Tilden, 2017; Stanley & Stanley, 2019; Van Kuiken et al., 2016; West et al., 2016). Despite the widespread publication of the WHO (2010) definition stating that IPE involves students learning "about, from, and with each other" (p. 10), many programs do not incorporate these components. As schools struggle with mandates to include IPE in their curricula, they may identify activities as IPE that do not meet the established criteria (ex. concurrent enrollment in courses, health fairs). Activities that simply expose students from different professional programs to each other in a shared space do not provide enough interaction to achieve the goals of IPE (Ketcherside et al., 2017; Steven et al., 2017; Teodorczuk et al., 2016). Also, training focused on tasks and not teamwork allows learners to leave the activity without having gained the benefit of interaction (De Vries et al., 2017).

The lack of knowledge related to IPE program development and implementation results in poorly designed programs that fail to achieve desired goals. For optimal results, IPE should be implemented early in the curriculum, should be mandatory for all students, and should be based on a developmentally leveled framework that extends across the curriculum and addresses roles and interactions of all professions within the student group (Alfies et al., 2018; Frantz & Rhoda, 2017; Ketcherside et al., 2017; Konrad et al., 2017; Van Kuiken et al., 2016). Learners who are exposed to IPE early and regularly in the curriculum, especially in the combination of classroom plus clinical experiences, have

a better understanding of their roles, are less likely to embrace stereotypes about other professionals, and are more likely to develop mutual respect and improved communication within the healthcare team (Joseph, 2016; Ketcherside et al., 2017; Schrapmire et al., 2018; Tilden, Eckstrom, & Dieckmann, 2016; Van Kuiken et al., 2016). In many programs, IPE activities are isolated or voluntary, with schools sometimes offering just one event over the entire curriculum, so that not all students get the benefit of the training (Brewer et al., 2018; Homeyer et al., 2018; Maree et al., 2017; Van Kuiken et al., 2016). Additionally, IPE exposure frequently occurs late in the curriculum after students have developed professional-centric attitudes that could negatively influence IPE acceptance (Al-Quatani, 2016; Beck-Dallaghan et al., 2018; Homeyer et al., 2018; Maree et al., 2017; Schrapmire et al., 2018).

Many health professions faculty lack personal IPE experience and knowledge. Though they might have worked in teams in the past, instructors who entered the healthcare professions before the emphasis on collaboration evolved may not have participated in IPE training. Faculty who are not familiar with IPE principles are uncomfortable teaching across disciplines and tend to focus on their professional perspectives, which undermines the goals of IPE (Berger et al., 2017; Schrapmire et al., 2018). To help support IPE initiatives, IPEC developed core competencies and created training modules for faculty development (IPEC, 2016). However, lack of faculty development related to IPE continues to be a problem with support varying from none to widespread (De Vries et al., 2017; Grymonpre et al., 2016; Stanley & Stanley, 2019; West et al., 2016).

The degree of role identity also affects attitudes about IPE. The IPEC core competency for roles and responsibilities asks that team members use knowledge of their roles and those of other team members to assess and promote the health of the client or population (IPEC, 2016). Further, recognizing unique and shared disciplinary skills contributes to team effectiveness (Gilbert, Veesenmeyer, & Limon, 2019; Homeyer et al., 2018; IPEC, 2016; Schrapmire et al., 2018). Although many faculty members know their roles well and are comfortable exploring the roles of others and teaching across disciplines, others prefer to remain in their comfort zones and fear that IPE will result in loss of role, which contributes to IPE resistance (Berger et al., 2017; Buller, 2015; De Vries et al., 2017). Students who do not yet know their roles are more resistant to IPE, whereas more experienced learners with a strong role identity are more accepting of IPE activities (Lestari et al., 2017; Sollami et al., 2018).

Conversely, faculty who are concerned about initial professional role development may wait too long to introduce other professional roles, resulting in negative perceptions about other healthcare professions and resistance to IPE (Joseph, 2016; Sand & Osgood, 2016; Teodorczuk et al., 2016). Even though IPE may be partially implemented in the classroom, persistent uniprofessional behavior in the community results in fewer collaborative practice role models and fewer opportunities for students to observe collaborative care (De Vries et al., 2017; Schrapmire et al., 2018; Tilden et al., 2016). Lastly, lack of respect, low appreciation for other professions, and unknown prejudices contribute to lack of knowledge about other professional roles and inhibit IPE

implementation (De Vries et al., 2017; Homeyer et al., 2018; Schrapmire et al., 2018; Stanley & Stanley, 2019).

Sustained implementation of IPE programs requires institutional commitment and an academic organizational structure that supports IPE activities (Grymonpre et al., 2016). In situations where resources are scarce, there may be competition for resources such as funding for equipment and staffing, and battles over turf used for IPE activities (Bonello et al., 2018; Van Kuiken et al., 2016). Institutional support includes policy development and resource allocation aimed at curricular integration between programs, faculty development, faculty assignments, classroom and laboratory support, student clinical placements, and the strategic plan should address how each supports the IPE program (De Vries et al., 2017; Frantz & Rhoda, 2017; Grymonpre et al., 2016; Sand & Osgood, 2016). Professional accreditation regulations can guide institutions in developing policies that support IPE initiatives and improve success (De Vries et al., 2017; Grymonpre et al., 2016; IPEC, 2016). Despite regulatory encouragement for institutions to support IPE, lack of planning and resource allocation results in programs being managed by small clusters of volunteers or individual champions who often become frustrated with the process and revert to their previous siloed practice (Frantz & Rhoda, 2017; Van Kuiken et al., 2016).

One of the greatest challenges for IPE implementation is that it requires stakeholders to adjust traditional ideas about professional hierarchies (Bigbee, Rainwater, & Butani, 2016; Schrapmire et al., 2018). The IPEC core competencies promote mutual respect, team communication, shared decision-making, and overlapping professional

responsibilities (IPEC, 2016). But in practice, lingering perceptions favoring traditional roles and hierarchies in healthcare inhibit faculty, students, and community healthcare professional support for IPE activities (Tilden et al., 2016). Ongoing attitude places physicians at the top of the hierarchy and affects IPE attitudes of teachers, students, and practitioners, depending on where they perceive themselves to be on the spectrum (Verma et al., 2016; Yursa, Findyartini, & Soemantri, 2019). Medical faculty had lower levels of adoption than nursing faculty and did not perceive IPE to be a valuable activity (Bigbee et al., 2016). Sollami, Caricati, and Mancini (2018) found that the higher the acceptance of professional hierarchy among medical and nursing students, the more they believed that they should learn separately from each other. However, in that same study, students lower on the spectrum were more receptive to IPE than those at higher levels (Sollami et al., 2018). In the United Kingdom, medical graduates who valued traditional hierarchy adopted a "doctor knows best" attitude and were less likely to engage in collaborative practice (Verma et al., 2016, p. 8). Hierarchy also influences what learners expect from IPE activities. Though generally receptive to IPE, nursing students expressed doubt about whether they could learn with medical students, who they perceived to be more capable, and medical students at the same institution were more idealistic and expected to take leadership roles in IPE activities (Lestari et al., 2017).

One of the most common barriers to IPE implementation could be resistant attitude. Resistant attitudes are present among institutional leaders, faculty members, students, and community professionals, and can be covert or overt (Al-Quatani, 2016; Beck-Dallaghan et al., 2018; Bonello et al., 2018; Maree et al., 2017; Sand & Osgood,

2016; Schrapmire et al., 2018; Sollami et al., 2018). Resistant attitudes result in perceptions, decisions, and actions that trickle across the organization to undermine IPE implementation and sustainability. Lack of buy-in from those in leadership roles could affect the allocation of resources and encourage similar attitudes among subordinates (Brewer et al., 2018; Buller, 2015; Haque et al., 2016). Negative faculty attitude toward IPE resulted in negative student attitudes about IPE, and, even after participation in IPE activities, observation of professional-centric behavior by community healthcare professionals resulted in resistant attitudes about adopting IPE (Beck-Dallaghan et al., 2018).

Organizational culture and readiness for change. An organization's ability to change depends on multiple influences. Buller (2015) defined an organization as "a structured system in which individuals come together as a group in order to achieve a common goal" (p. 11). Mintzberg (1983) said organizations are comprised of five parts (a) the operating core (people who do the work), (b) the top management, (c) the hierarchy between the working core and top management, (d) the technostructure (those supplying ideas), and (e) the support staff. How knowledge moves through the organization to effect results depends on differences and similarities in codes, terms, protocols, values, and perceived turf of subgroups within the organization (Dee & Leisyte, 2017). The structure of the organization, roles, and relationships of its members, and collective and individual values can result in a positive or a negative effect on the organization's ability to change (Brewer et al., 2018; Dee & Leisyte, 2017; Doyle & Brady, 2018; Haque et al., 2016). Change occurs within multiple frames/levels, including

the structural/operational level, the human resources level, the political level, and the mindset/cultural level (Bolman & Deal, 2014). But culture is intertwined with each frame, and to overcome barriers to change, you must change the mindset of the organization (Bajis et al., 2018; Bolman & Deal, 2014; Sand & Osgood, 2016). Examining and evaluating the culture when considering a change, and then at intervals during the change, can provide insight on how to best address change and promote smoother transitions (Brewer et al., 2018; Dee & Leisyte, 2017; Evans, Baker, Berta, & Barnsley, 2015).

Knowing about an organization and what is important to its members can facilitate change. Buller (2015) said the organizational culture addresses the collective assumptions, strategies, roles, and legacies of members of the group. Hofstede et al. (2010) said organizational culture sets the climate that results in groups acting and interacting in a specific way that "sets them apart from people working for other organizations" (p. 343). Also, the interaction of organizational components is affected by individual values of the leadership and members within the organization, and the values of the organization itself (Hofstede et al., 2010). The leadership and structure of an organization can enhance or slow innovation. Positive leadership attitudes toward change promote a culture of learning that leads to increased innovation and sustainability of change (Brewer et al., 2018; Gil, Rodrigo-Moya, & Morcillo-Bellido, 2018). When leadership portrays change as a loss instead of an opportunity, the attitude spreads throughout the organization, increasing the risk of failure (Dee & Leisyte, 2017).

The structure and faculty membership of the academic health professions programs frequently present a mix of organizational cultures that could affect the capacity to change. Academics are less likely to accept the traditional hierarchical structure with top-down decision making, which results in a more distributed organization (Buller, 2015). Conversely, traditional healthcare environments are more hierarchical with medicine typically on the top tier (Bigbee et al., 2016; Homeyer et al., 2018). Stratified organizations with large power differentials among members are less likely to accept IPE, whereas more egalitarian groups have more success with implementation (Lestari et al., 2017; Sollami et al., 2018). Faculty from schools of medicine frequently have a more hierarchical view of organizational structure than other healthcare academics and perceive IPE as something that takes time away from other more valuable activities (Brewer et al., 2018; De Vries et al., 2017; Sundberg, Reeves, Josephson, & Nordquist, 2019). Traditional healthcare hierarchies in higher education also contribute to turf battles, competition for resources, and persistent practice that undermines IPE adoption and implementation (Bonello et al., 2018; Sollami et al., 2018).

Perceptions about individuality and collectivism affect the organization and vary with the culture. Organizations in which members value the interest of the individual over the interests of the group are less likely to adjust their behavior to support change (Bonello et al., 2018; Hofstede et al., 2010). Managers and those who perceive themselves to have more control over their work have more positive views of change, and those who perceive little control over their work environments have more negative views of change (Buller, 2015; Gover, Halinski, & Duxbury, 2016). In higher education

institutions (HEIs), the more distributed structure can work against innovation. Brewer et al. (2018) said increased complexity in HEIs and the more individualistic culture of academic centers could make them less accepting of a change.

Readiness to change may be affected by traditions within an organizational culture. The IOM (2015) reported that professional culture could be one of the most powerful barriers to IPE implementation. The values, symbols, heroes, and traditions within the organizational culture create a sense of inclusion, provide stability within the culture, and contribute to group survival (Hofstede et al., 2010). Health professions programs promote their professional cultures through pinning ceremonies, white coat ceremonies, the celebration of professional icons, and citation of professional oaths, all of which promote membership in the in-group. But IPE disrupts professional cultures, challenges traditional hierarchies and roles of their members, and requires that faculty work outside of their traditional comfort zones (Schrapmire et al., 2018; Stanley & Stanley, 2019).

The underlying tolerance of ambiguity and degree to which the change disrupts routines, roles, and values within the organization determines its response to change (Sand & Osgood, 2016). Organizational cultures with a high UAI are less likely to accept change (Bonello et al., 2018; Hofstede et al., 2010). Health professions faculty who opposed IPE implementation cited unclear roles as a major barrier (Berger et al., 2017; Lestari et al., 2017). Health professions graduates from cultures with a high UAI were more likely to resist IPE and less likely to develop a rapport with other healthcare professionals (Bonello et al., 2018; Verma et al., 2016). Changes that challenge both

values and traditions are less likely to succeed, especially if they are implemented without consulting stakeholders. Latta (2015) determined that resistance to and facilitation to change are affected by the degree of cultural alignment with organizational values and the process by which the changes are made. Changes that aligned with values but did not include stakeholder participation were resisted, and changes that did not align with values were undermined (Latta, 2015). When neither the content nor the change aligned with organizational values, the change failed until cultural issues were resolved (Latta, 2015). For change to succeed, both the content and the implementation approach need to align with cultural values (Latta, 2015).

Finally, an organization's response change depends on the organization's agility, the rate of change, and the intensity of change. Doyle and Brady (2018) said that to be able to meet constantly changing societal demands, HEI's need to develop a fluid mindset with a "constant ebb and flow of ideas" (p. 309) and focus on possibilities rather than solutions. This stance helps organizations develop the long-term orientation needed for success in a constantly changing environment. Organizations that cling to past remedies or focus on short term solutions may become overwhelmed with change and respond negatively. Sundberg, Reeves, Josephson, and Nordquist (2019) said IPE competes with other concurrent changes within organizations contributing to tribalism, silo mentalities, change fatigue, and lack of support.

Implications

This qualitative research study could provide greater insight on how to develop and sustain an IPE program at the site. First, it would help assess the current level of

understanding about what IPE is as well as faculty attitudes toward IPE. Lack of understanding or disagreement about what constitutes IPE is a barrier to implementation that is best corrected early in the implementation process (De Vries et al., 2017; Homeyer et al., 2018; Roslan et al., 2016; Sand & Osgood, 2016). Second, the project would identify components of the university culture that could promote IPE implementation and support sustainability and those that could inhibit or undermine IPE adoption and sustainability. The university has attempted to implement IPE, but the faculty have not demonstrated buy-in and organizational culture was contributing to the problem. Exploring and discussing HPFMs' perceptions about IPE and how organizational culture inhibits or undermines IPE effort would help find ways to align IPE with the university mission and values and promote buy-in. Discovering HPFMs' perceptions about how organizational culture promoted IPE would help identify implementation processes that were more likely to be accepted and supported.

Using information gathered from this study, I could design a faculty development program aimed at promoting IPE buy-in and sustainability and preparing faculty members for successful implementation. Training could clarify misconceptions and provide additional information to help faculty develop a shared understanding of the requirements, goals, and benefits of IPE. Once university health professions faculty understand the goals of IPE, how IPE supports the mission and values of the organization, and how IPE benefits graduates and those who they would care for, buy-in and sustainability could be enhanced.

Summary

Though the benefits of IPE are well known, and there are many tools available to help with implementation, the university under study had failed to implement a sustained IPE program. Regionally and nationally, HEIs are failing to successfully implement IPE and siloed health professions training remains the norm (Grymonpre et al., 2016; Mladenovic & Tilden, 2017; Van Kuiken et al., 2016). Although logistical issues such as asynchronous calendars, scattered locations, and varied curricula challenge IPE implementation, it is the culture that creates the greatest barrier (Al-Quatani, 2016; Asirvatham et al., 2019; Bajis et al., 2018; Beck-Dallaghan et al., 2018; Mladenovic & Tilden, 2017; Sand & Osgood, 2016; Tilden et al., 2016; Van Kuiken et al., 2016). Negative attitudes toward IPE among administrators, faculty, learners, and practicing healthcare professionals result in late or partial implementation. At the university under study, organizational culture was contributing to the lack of IPE implementation.

The literature demonstrated that the culture of an organization and its members, including power differential, individualism versus collectivism, uncertainty avoidance, and long-term orientation, affect organizational readiness for change. Members of hierarchical cultures, including health professionals, are more protective of their roles and may perceive that the change will threaten those roles, making them less likely to change. Members of organizations that value individual preferences over the collective good are less likely to accept change, whereas those in cultures that promote teamwork are more likely to adapt to meet new organizational goals. Cultures with high uncertainty avoidance are less likely to make changes, especially when potential outcomes are

unknown. Finally, organizational cultures that look forward instead of back or in the moment are more able to manage the constantly changing demands of society.

The purpose of this qualitative study was to understand HPFMs' perceptions about IPE and how those perceptions might be influenced by the organizational culture at the university under study. Informed by Hofstede's dimensions of culture theory, research questions for this qualitative study addressed faculty perceptions about how IPE was defined, how IPE was accepted, how organizational culture was perceived, and how organizational culture affected perceptions about IPE. Learning how culture influences faculty perceptions about IPE helped identify strategies to mitigate barriers and promote facilitators of the IPE program.

Section 2: The Methodology

Research Design and Approach

For this qualitative study, I sought to understand how organizational culture influenced HPFMs' perceptions about the implementation of IPE at the university under study. Researchers seeking to understand align their work with the constructivist paradigm, which is usually qualitative (Burkholder, Cox, & Crawford, 2016). Researchers working within the constructivist paradigm assume that there is no single truth, that knowledge and meaning are created through interaction with events and other people within one's world, and that reality is perceived differently by each (Burkholder et al., 2016; Rubin & Rubin, 2012; Yazan, 2015). People who live or work together may develop shared expectations, meanings, understandings, goals, and mindsets that create a cultural lens for the group (Buller, 2015; Hofstede et al., 2010; Rubin & Rubin, 2012). Using a qualitative design helped me understand HPFMs' perceptions about how culture influenced the implementation of IPE at the university.

Within the qualitative research paradigms are multiple methodological options, and a researcher must determine which method best suits the problem under study. The research questions and purpose are the primary drivers of qualitative research methodology, but context, conceptual framework, and a researcher's epistemological beliefs must also be considered (Ravitch & Carl, 2016). For some studies, there may not be a specific methodological approach that effectively answers the research question. Qualitative research that does not fit the criteria for a particular qualitative approach, either meeting some but not all criteria or combining features of multiple qualitative

methods, are termed general or basic qualitative studies (Ravitch & Carl, 2016). As my research did not fit the criteria for a specific qualitative approach, I used a basic qualitative methodology.

I considered case study and ethnography for this qualitative project. The case study is bound by time and place but typically includes multiple data sources, such as observations, interviews, and review of documents or artifacts (Merriam & Tisdell, 2016; Yin, 2009). Although this study could be described as being bound by time and place, I used a single data source, which did not meet the requirements for qualitative case study research. Because my goal was to learn about the effect of culture on perceptions, I also considered an ethnographic study. However, ethnographies require long-term immersion in the culture to collect data (Burkholder et al., 2016), and this approach would not have been feasible for the timeline of this research project.

To answer my research questions, I collected data from individuals about their perceptions related to organizational culture and IPE implementation. I considered focus group interviews but questioned whether individuals would share openly if they disagreed with others in the group or if they would agree with others to gain favor with group members. I opted for individual semistructured interviews. In focus group interviews, the responses of one person can influence the responses of another (Burkholder et al., 2016). Individual qualitative interviews allow a researcher to explore each participant's unique perspective, provide rich data, and develop a deep understanding of a phenomenon (Rubin & Rubin, 2012). Culturally focused interviews help a researcher understand the norms, rules, and values that underlie traditions and

behaviors (Rubin & Rubin, 2012). Using a semistructured qualitative interview approach provides a degree of organization but also allows follow up and probing to help answer the research questions (Ravitch & Carl, 2016). Because my research questions focused on perceptions about culture, conducting semistructured individual qualitative interviews encouraged participants to share openly, provided structure for me as a novice researcher, and best answered the research questions.

Participants

The target population for this study was purposefully sampled using a group characteristics strategy. Purposeful sampling selects those who know the most about the phenomenon of interest to best answer the research question (Ravitch & Carl, 2016). The research questions addressed perceptions of HPFMs about the culture of the institution and implementation of IPE, so my selection criteria addressed these points. Group characteristics sampling aims to select participants to generate rich information that can reveal group patterns (Patton, 2015). The selection criteria for study participants included (a) faculty member currently teaching one or more health professions courses in one of the five health professions schools at the university and (b) full-time faculty status at the university for 2 years or more. HPFMs were appropriate for this study as they were currently involved in the delivery of health professions curricula and would have the perspective of a faculty member in these fields. A minimum of 2 years with the organization was required as newer faculty members would still be learning about the organization and would be less likely to know the culture of their schools and the university in general.

Once this study was granted IRB approvals from Walden University (08-14-19-0651029) and the research site (19-09-003), I worked with a site liaison to contact the health professions deans of each program and requested permission to contact HPFMs via e-mail. The deans provided a list of recommended HPFMs, whom I invited to participate in the study. My initial contact with faculty members was through blind-copied e-mail to provide potential participants with a brief description of the study, the informed consent documents, and my contact information. Although there is no set number of recommended participants for qualitative interviews, research suggests that interviewing six–12 participants can achieve saturation (Guest, Bunce, & Johnson, 2006; Ravitch & Carl, 2016). I received responses from 13 HPFMs representing all five professional schools, but not all volunteers met the inclusion criteria. I conducted eight interviews with HPFMs who met the inclusion criteria. Six were female, and two were male. Experience ranged from 13 to 42 years, and university service ranged from 4 to 19 years (see Table 2).

Table 2

Participant Experience and Service to the University

Participant	Years in practice	Years in higher education	Years of service
Participant 1	30	23	4
Participant 2	20	19	19
Participant 3	42	15	15
Participant 4	32	12	12
Participant 5	13	12	11
Participant 6	16	6	6
Participant 7	13	9	7
Participant 8	33	30	3

Qualitative research relies on establishing relationships and building rapport between the researcher and the participants. To build the relationship, qualitative researchers need to identify expectations, goals, benefits, risks, and assumptions related to the project (Ravitch & Carl, 2016). I was a faculty member of the school of nursing at the university and managed the clinical learning center. I did not supervise any other faculty members, but there was potential that I could have had a previous working relationship with them. My familiarity with potential participants did not preclude the participation of otherwise qualified faculty members. Knowing something about a participant in advance can reduce tension during the interviews (Rubin & Rubin, 2012). It is crucial to find and communicate a research role that is understood and acceptable to the participants (Rubin & Rubin, 2012). When the research involves culture, Rubin and Rubin (2012) advised that the most effective researcher role would be that of the novice. Therefore, although I was a faculty member at the university, I explained to participants that my role for the project was more that of a peer learner with the specific goal of discovering how the culture of the organization affects perceptions about IPE implementation. Before any data collection, I assured participants that their participation was voluntary, that they could withdraw at any time, and that their interview data would be kept secure. I also informed them that they would have an opportunity to review data related to their participation and provide feedback and that any information shared from the project would be deidentified. Finally, I coordinated with participants regarding interview dates and times that worked best for them.

Data Collection

The primary data source for this research project was semistructured qualitative participant interviews. Referred to as "conversational partnerships" (Rubin & Rubin, 2012, p. 7), qualitative interviews allow the researcher to collect rich, detailed information by asking open-ended questions and adjusting follow-up questions and probes to the responses of the participant. Researchers use semistructured qualitative interviews to address a specific topic and frequently prepare an interview protocol in advance to organize questions, probes, and potential follow-up questions (Burkholder et al., 2016; Ravitch & Carl, 2016; Rubin & Rubin, 2012). Although the interview protocol serves as a guide and specific questions may be asked of all participants to address the research questions, each semistructured interview proceeds uniquely, depending on how each participant answers the questions (Burkholder et al., 2016; Ravitch & Carl, 2016). The main questions are structured to answer the research questions, follow-up questions provide depth and richness to support thoroughness and credibility, and probes help manage the conversation (Rubin & Rubin, 2012). As each participant would bring a unique perspective regarding how culture affects perceptions about IPE, the flexibility of the semistructured qualitative interview was appropriate for this project. I designed the interview protocol to answer my research questions and included (a) space for documenting logistical details, (b) a scripted introduction, (c) interview questions with suggestions for probes and follow-up questions, (d) space for notes and observations related to each main question, and (e) a scripted conclusion (see Appendix B).

Interviews were conducted using video conferencing. The combination of increased functionality of video conferencing tools, increased public acceptance of computer-mediated communication, increased convenience, and ability to overcome geographic barriers makes video conferencing an effective method for qualitative data collection (Burkholder et al., 2016; Nehls, Smith, & Schneider, 2015). I used Zoom video conferencing as it was available to all university faculty. In addition to faculty convenience for scheduling the interviews, video conferencing removed any potential turf issues created by traveling between campuses. Once an interview time was scheduled, each participant received an invitation to the conference via password-protected e-mail. For added security, I required a password to join the meeting. I allotted 1 hour for each interview and set the conference settings so that an audio transcript was automatically generated. The combination of the audio recording and the transcript supported my data collection and analysis. The automatic transcript feature allowed me to focus more on the participant during the interview and provided a real-time account of the conversation for later reference. I compared the transcripts to my field notes for data triangulation and immediately began to code the data from the transcript. Revisiting the recordings allowed me to observe for nuances in data that I might have missed during the interview. To keep track of the data, I assigned each participant an alpha-numeric code and labeled the recording and transcript with that code. I also labeled my field notes with the same code but recorded and stored them separately.

Before each interview, I reminded the participant of my role at the site and my role as a researcher. Though I was a manager within one of the health professions

schools, I did not supervise any other faculty members. I restated that the goal of the interview was to learn about how culture affected HPFM perceptions about IPE implementation in the academic setting.

Data Analysis

The data analysis for this project began with the initial data collection and continued throughout the project. Data analysis is iterative and requires that the researcher organizes and manages the data, engages immersively with the data, and writes throughout the process to make sense of the data (Ravitch & Carl, 2016). To manage the data, I created a designated folder and sub-folders within my secure OneDrive account. I sorted transcripts, field notes, coding, and analytic memos into separate folders.

Engaging the data begins during data collection and consists of multiple reviews, iterative coding, categorization, theme generation, and scrutinizing findings (Ravitch & Carl, 2016; Saldana, 2016). Reading the transcripts and comparing them to the interview recordings helped me create word-for-word accounts of the interviews that I used to code the data. Coding is the process of recognizing patterns in the data that are later categorized and analyzed to help understand the phenomenon (Burkholder et al., 2016; Saldana, 2016). Though coding can be done manually or with the assistance of computer-assisted qualitative data analysis programs, such applications require additional learning and do not analyze the findings (Rubin & Rubin, 2012; Saldana, 2016). To help me engage the data, I used manual coding for this project. There is no right or wrong way to code, and the researcher may employ one or more methods, which are driven by the

research questions, the nature and volume of the data, and the focus of the study (Ravitch & Carl, 2016; Saldana, 2016). Saldana (2016) described a multicycle coding approach to help organize and analyze the data. Coding may start before data collection with a set of a priori codes that are derived from the literature review, conceptual framework, and research questions (Ravitch & Carl, 2016; Saldana, 2016). Qualitative researchers use first cycle coding to assign initial codes with one of seven methods (a) grammatical, (b) elemental, (c) affective, (d) literary and language, (e) exploratory, and (f) procedural (Saldana, 2016). In vivo coding, a first-cycle elemental method is based on the participant's own words, is especially suited for interview analysis, and is recommended for novice researchers (Saldana, 2016). Values coding is a first-cycle affective method that is useful for exploring the culture (Saldana, 2016). Second-cycle coding is used to reorganize and reanalyze codes and includes pattern coding and axial coding (Burkholder et al., 2016; Saldana, 2016). Pattern coding is used to group codes into fewer categories, themes, or concepts (Saldana, 2016). The axial coding cycle approach is commonly used for interview transcripts in which the researcher revisits initial codes to determine categories and interconnectedness, split or combine code clusters, and prioritize dominant codes (Burkholder et al., 2016; Ravitch & Carl, 2016; Saldana, 2016). I used a combination of in vivo coding and values coding for my first-cycle coding and axial coding for my second-cycle method as I analyzed interview transcripts about research questions related to culture.

Throughout the data analysis process, I used writing techniques to help manage and interpret the data. Preliminary jottings in field notes can contain valuable

observations and insights and can be coded to contribute to the data but should be separated from the body of the data (Saldana, 2016). Codes should also be stored separately from the data corpus, should be defined, and should have inclusion and exclusion criteria (Saldana, 2016). Finally, analytic memos help the researcher reflect on the data and can be used to address field notes, data collection, and all phases of coding (Ravitch & Carl, 2016; Saldana, 2016). With each interview, I made notes that I later compared to the transcripts. I made additional notes on the automatically generated transcript drafts as I listened to the interview recordings and verified the transcripts. The process of transcript verification required multiple listening and editing sessions to create an accurate word for word account of the interview and facilitated analysis. Once the transcripts were verified, I reread and notated key passages that generated the initial in vivo codes. Next, I created an Excel file that matched key passages to their assigned codes with one page for each interview, a separate codes page, and a combined interview and codes page. From this file, I was able to evaluate codes further, identify code clusters, and combine them into several themes. Beginning with the interview notes and throughout the analysis process, all data was deidentified using alphanumeric codes. Electronic data was stored in a password-protected file within my OneDrive account, and handwritten notes were stored in a locked file cabinet in my office.

I also took measures to promote trustworthiness. Burkholder et al. (2016) defined dependability as “evidence of consistency in data collection, analysis, and reporting” (p. 76) and said that credibility means that the findings are believable. Strategies used to promote trustworthiness include triangulation, member checking, progressive

subjectivity, reflexivity, and negative case analysis (Burkholder et al., 2016; Ravitch & Carl, 2016). Triangulation uses data from multiple sources or multiple methods to come to the same conclusion (Burkholder et al., 2016; Ravitch & Carl, 2016). Progressive subjectivity and reflexivity involve self-evaluation to identify biases and expectations of the project and document and how the researcher may be influencing the project (Burkholder et al., 2016; Ravitch & Carl, 2016). Member checking allows participants to review the data and the researcher's analysis and provide feedback about whether it accurately represents their perceptions (Ravitch & Carl, 2016; Saldana, 2016).

Data Analysis Results

The purpose of this qualitative research study was to understand HPFMs' perceptions about IPE and how those perceptions might be influenced by the organizational culture at the university under study. Four research questions guided the study to achieve the purpose. In the following section, I will discuss the presentation of the data, the themes that evolved from the data and the theory, and my conclusions.

Presentation of the Data

Research Question 1. The first research question was, "How do HPFMs at the research site define IPE?" Though the WHO (2010) defined IPE as "students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes" (p. 10), only three participants (1, 4, and 7) included this information in their definitions. Other participants' definitions focused on collaboration and teamwork but missed one or more of the WHO IPE components. For example, Participant 2 said, "I think it's having the students learn together, recognizing that their

part of the healthcare team is alongside other roles and professions." Participant 3 identified IPE as "A collaboration in the education of students from various professional backgrounds." Participant 8 defined IPE as "Helping our students learn how to work collaboratively with other professions. Participant 6 said IPE happens "When two or more health professionals learn about and from one another to provide quality care for the patients that they will serve." One HPFM was unfamiliar with the term IPE. Participant 5 said, "That's a great question. What is the…what does the acronym actually stand for? I really don't even know much about it." That participant did report familiarity with the term *interdisciplinary education*.

Participants who reported being more familiar with IPE stressed that, to qualify as IPE, learning activities must support students learning with, from, and about each other. They emphasized that simply talking about other health professions during class or scheduling students to attend an event at the same time as other health professions students but without interaction would not qualify as IPE. Participant 4 said:

> It doesn't mean that you sit students from two or more professions into a lecture hall and lecture to them. It has to be that they interact with each other. It has to involve that they are really having a quality experience where they're talking with one another. They're learning about each other's professions.

Also, HPFMs who reported more experience with IPE said that, to be understood, IPE needs to have well-defined outcomes that are developed collaboratively and clearly expressed. They reported that, without clear goals, both faculty members and learners would be uncertain about what to expect of the experience and what types of activities

would help achieve them. Participant 6 said, "Sometimes the goals can be poorly defined. I think that that might be a criticism…is the objectives may not be all that clear. But I think with IPE in general that there needs to be better-defined objectives to activities." Participant 8 said, "It would have to be something that we work all together on…to put together and come up with, you know…what are our goals? Our session objectives? What are we trying to accomplish with this?" Participant 1 noted that goals must be explicitly expressed, instead of implied and said:

> There are a couple of crystal-clear things that have to be in place…and that is implicitness can't work in IPE. You have to say, "I'm planning to work with other professionals. I'm asking these other professionals for their input." It has to be explicit. Or the same with two students…the two preceptors tell them "you have to work together on this project" … that explicitness makes a difference.

Research Question 2. The second research question was, "How would HPFMs at the research site describe their own attitudes toward IPE?" Nearly all participants reported a high workload and lack of time as challenges to developing and implementing IPE in their programs. The HPFMs reported that they struggled with fitting IPE into already tight schedules and hesitated to add IPE to student workloads. Participant 5 stated, "With all the other things that we as faculty do to coordinate and schedule and plan, it takes time. And I think that becomes a barrier for the participation of these types of activities." Participant 8 said, "The biggest thing would be the time that it would take to dedicate to doing this. I'm personally spread really thin. You know, like, I can't even imagine having another task put on me at this point." Participant 4 said, "The hours and

hours and hours that go into preparing all of that is overwhelming at times. If we're going to make progress, we're going to have to address that some faculty workload should be allotted."

Most HPFMs also reported that IPE is perceived as extra, especially when no credit is given for their work. They reported that activities occurred outside of scheduled class times with no release time during the week to compensate for the extra hours. Participant 1 said, "And for too many organizations, IPE is evenings Friday afternoons and Saturdays, instead of being integrated into the curriculum." Participant 4 said, "Students are being asked to come in on a sixth day of the week. And there's resistance to that. I mean, they're human, just like we are. Just like we don't want to work six days a week."

Participant 7 said, "I think that some of the folks at our school really do feel like interprofessional things are extra…that it's not on the board exam. So, it means it's not as valuable."

Further, HPFMs reported that the current organizational practice did not recognize IPE development through faculty workload assignments or evaluations. When weighing competing activities, perceptions about what was required and what was extra, and which activities were recognized and which were not, faculty members reported that they may not have viewed IPE as a priority. Participant 5 said, "I think we actually are overwhelmed with day to day tasks…expectations of research, expectations of in-house committee services. It becomes an added project that in reality is not a necessity."

Conversely, faculty also reported IPE as having positive impact on learning. Participant 4 described a growing passion for IPE, stating, "Every time you do something, you see the value of it. And you see how rich the experience can be for students." Participant 5 described a shift in teaching and testing style related to previous interdisciplinary work and said:

> It's because of those experiences that I've moved away from the traditional pedagogical teaching style with the mid-term, final exam, and moved much more towards the experiential design and really implemented service-learning projects. I want to see them in the field more than I do a chair sitting and writing at a desk.

Research Question 3. The third research question was, "How do HPFMs at the research site describe the organizational culture?" Participants were asked about the culture of their professions as well as that of their professional schools and of the site overall. Responses from HPFMs focused on the persistence of traditional roles, competition between the schools, and the benefit of the university tenets and mission.

Participants reported that there was persistence of traditional health professions hierarchies that affected HPFM attitudes, especially toward collaboration. Participant 3 reported that this hierarchy contributed to a perception of inequality between health professionals and said:

> I mean, there's been a long-standing kind of hierarchy that's been in existence for a long time. And so, trying to help everybody see that everybody's on an even keel may not always happen. I'm not sure they always value us being on the same field.

Participants also cited described ongoing acceptance of existing power differentials and unwillingness to cooperate. Participant 3 said, "I'm not sure that everybody in every profession has the same opinion what collaboration among professions means. I'm not sure every school really values the collaboration with other professions." Participant 7 described fragmented collaboration, and said, "You know, some professions may not collaborate as much with other professions. They see it as, like, well, I only really need to learn with the physicians, because they're the people that I talk to the most."

Also, HPFMs reported that the organization of the five professional schools affected the culture. The five professional schools are located on separate campus and HPFMs described logistical and philosophical factors including duplication of services, competition for resources, and a lack of coordination that contributed to the culture. When discussing the duplication of resources, Participant 2 said:

> Some programs are larger and have more teaching resources more faculty than the smaller programs. That shared resource could save the university money. And a class already being offered…instead of having to hire another person in each field, if it's shared, they can all take the class together.

Participants reported that schools competed for resources and that they leveraged traditional hierarchies to get what they wanted. Participant 5 said:

> I think there are power differentials there that definitely are inhibiting things. For instance, we have some people…you know, certain schools wanting to take more

> of the budget…to do what they want to do rather than looking at how can we distribute money so that everybody can be equally involved.

The separate schedules of the campuses were also perceived to result in rigid behavior and a lack of cooperation. Participant 1 said, "So, we're all on these different calendars and we have our rigidity of our curriculum in places and we're not willing to give things up."

Most HPFMs identified the mission and tenets of the university, specifically that of service to the students and to the community, when discussing the culture of the site. Participants reported a personal and professional connection with the service ethic that influenced perceptions about the site. Participant 1 said:

> I much prefer being at a school that has a service-learning social mission, as opposed to a university with a research dollar mission. I think we do a better job teaching our students when we have that social contract and social justice service orientation.

The tenet of service is also perceived to be widely embraced across the university. Participant 4 said:

> I think our culture is also that we're very dedicated to the students, that also this culture where we have the huge benefit of faculty who believe in the mission of the university and are dedicated to that…those are plusses, you know?

When discussing administrative support for service, Participant 1 said, "And the fact that our university president brings up the tenants when he does university-wide talks sort of aligns those things with us."

Research Question 4. The final research question was, "How do HPFMs at the research site describe how organizational culture affects the implementation of IPE?" Participants were asked to share perceptions about which elements of the culture could inhibit IPE implementation and which elements of the culture could enhance IPE implementation. They were also asked to describe how cultural elements would affect sustainability of an IPE program.

Inhibiting elements. The level of support for IPE was perceived to be inconsistent from department to department, depending on whether IPE was mandated through accreditation and the presence of competing priorities. When accreditation was not required IPE, deans were perceived to be less supportive of IPE implementation. Participant 1 said:

> If the deans don't feel like there is a need for it from an accreditation point of view, and they personally don't see a big need for it, they're not really going to put resources toward it and help the boots on the ground.

Participants also questioned whether faculty members and deans would support changes in the presence of competing priorities. When discussing faculty priorities, Participant 4 said, "And I think it's very easy for IPE ideas, though, to be on the back burner often because there's more…what people perceive is more pressing issues that we have to deal with." Though some HPFMs reported high IPE interest from their deans, they expressed doubt about whether administrators would support changes necessary to implement and sustain an IPE program. Participant 7 said:

> I think we have lip service and some bobble-head nodding. But when the rubber meets the road, are they willing to make a faculty member move a lab to be able to let an event take place? Are they willing to give a dedicated IPE day once a semester? I don't think we're at the point that our deans would do that right now across the board.

Some HPFMs reported a lack of administrative support related to increasing IPE participation. Participant 7 said, "They want us to recruit other faculty to participate, but I have no authority over those other faculty. I can't make anyone else participate in an interprofessional activity." Though early adopter HPFMs had participated in previous IPE activities, they reported that the lack of administrative support made it difficult to sustain their efforts. Participant 4 said, "In the past, we had these grassroots efforts that were happening by a few individuals who were passionate about IPE on the faculty. But without administrative support from the deans, we haven't been able to sustain progress."

At the university level, HPFMs reported that there was a general lack of knowledge about IPE and that other university initiatives competed with and diverted resources away from IPE efforts. The lack of knowledge was perceived to contribute to lack of interest in IPE. Participant 4 said:

> I see that people are not very comfortable with IPE, and therefore, we've got a huge need for training to overcome. And probably, to some extent, they don't see the value of IPE. So why should we do this? Why should we go through the effort?

Also, HPFMs noted that a until IPE activities were recognized publicly, there was a lack of support. Participant 5 said:

> I think that they like to throw the term around, but it's not really something that's being fostered until there's recognition from the university. When someone says, "Yes, this is so great," then you see recognition from the school. There's not a lot of fostering within the institution to help build that this type of pedagogy up. So, I think that the idea is, is good, but I think the execution within the institution has been minimal at best.

Another HPFM noted that competing priorities for use of campus facilities affected availability for IPE activities. Participant 7 said:

> There needs to be some protection of time or space to allow these (IPE events) to happen. We're trying to plan our course meeting for the spring. It's on a Saturday, and the large rooms are booked by other events. We're struggling to get space because these things aren't prioritized, and I believe they should be.

A few HPFMs expressed concern about the how future administrative support would affect IPE implementation. At the time of the study, there were two senior administrative vacancies at the site. One vacancy was the dean of one of the health professions schools, and the other was the provost. The acting provost was a healthcare professional who was informed about and supported IPE implementation efforts. Faculty members expressed concern regarding the level of support and knowledge that would be provided by new leadership. Participant 7 said, "They're doing a national search for the provost, and I think that is going to be huge in who that person is. And their buy-in for

interprofessional work could make or break our plans, you know." When discussing the IPE expertise of the future dean and provost, Participant 1 said:

> And so, they're just not schooled in it ... doesn't mean there'll be a bad person for it. Just means they don't come with experience. So, I think that's a challenge for the school down the line ... And I mean the school, the university.

Participants reported that competition and conflict between professional schools had hindered previous efforts at IPE implementation. Problems identified included faculty from one or another school trying to exert control over the location, timing, or content of the activity that was resisted by others. Participant 4 said:

> Efforts that have been attempted in the past were stalled by people feeling territorial about things…and feeling like, for example, that the _____ faculty were trying to take over the IPE. So then the IPE stalls, because we can't come to an agreement about how we're going to work together. And, you know, the irony is the whole point of IPE is working together, and even the faculty who believe in it can't work together.

Lack of flexibility regarding conflicting calendars and curricula of the professional schools were also perceived to inhibit IPE implementation. The logistics of separate academic calendars made it difficult to schedule IPE activities. Participant 4 said:

> One of the things that is very challenging the academic calendar. Some have a spring and fall semester where the other professional programs are on a year-round calendar, and so developing activities that can be ongoing is hard just

> because of that issue. And again, the literature shows that we're not alone in this issue. Every university deals with this.

Day to day demands of implementing program curricula were perceived as priority and competed with IPE initiatives. Participant 7 said:

> I would say some of the faculty resist giving course hour time for these types of experiential learning activities. I think that they feel that the time could be better used focusing on their individual course content rather than applying it in a setting with other students.

Participant 6 said, "The drawbacks are scheduling…I mean, everybody's always defensive of having to get their own curriculum into such a small amount of time as it seems." Participant 8 said, "I have some ideas about what I would like to incorporate, but we're just keeping up with our curriculum right now."

Finally, faculty and administrative openness to change and power differentials were perceived as a barriers to IPE implementation. One HPFM noted that being open to change could help the site avoid problems encountered by other institutions who had implemented IPE. Participant 7 said:

> I think if we had an openness to, you know, or maybe just knowledge of this huge repository of information that we have at the National Center for Interprofessional Practice and Education, that we don't have to reinvent the wheel. I think that also, the literature about the barriers…there's a ton of it. And I think that if we, as a group, as faculty and administration, would consume some of that literature, we

> can use it to not reinvent the wheel and not make all the same mistakes and start at a good place.

Another HPFM questioned whether administrators would allow an IPE implementation team to make changes necessary to achieve success. Participant 1 said:

> I would love to see that (IPE) center having a little bit of real power instead of being simply a forum for discussion. I think I don't think that's realistic. To be honest, I think deans will retain all the power…the deans and the provost. Those in an administrative direct line will retain the power. But I would love to see a center having some direct power ... like the center director, being able to tell the deans, "you will do this many IPE activities you will set aside this much time" … and let the boots on the ground, do the work. But I'm a realist, too.

Enhancing elements. Although HPFMs identified many cultural factors that inhibited IPE implementation, they also reported conditions that could enhance IPE implementation, including respect for faculty member contributions, the dedication of the faculty, senior administrative interest, and the service-oriented mission of the school. When discussing the recognition of faculty members' progress with IPE implementation, Participant 3 said:

> I think we have a respect for the various talents that other people have, and we have looking at IPE. I know several of our faculty have an interest and have really been promoters of that in our curriculum, which has helped others come along…It's getting better and better because, you know, part of it is because we have individuals who have made that a focus of their study or their dissertations. I

> mean, so we're getting a stronger foundation in that. And then we're using those people to help us implement some kind of strategy. I think that's going to help us along the way.

When discussing the contributions of faculty member early adopters to IPE implementation, Participant 7 said:

> It is our schools who have faculty that are champions. I think, that is a huge facilitator. And they're not people who are who are…I don't want to say not going to take no for an answer…But there are people who are passionate enough that we're going to make it happen even if we don't have the support. That has been what I've seen that over the years, is that once the faculty decide we're going to make this happen we figure out a way to do it.

Senior leadership interest is also seen as an IPE facilitator. Faculty members reported that the college president has expressed interest in developing IPE and has been supportive of past IPE efforts. Participant 7 said, "

> And then ... I'm trying to think of at the organizational level…I feel like even the president values these activities. He's popped in to see the poverty sim. He asked me questions about the events that we have going. So, I believe that from the top, they value it. We just have to figure out how we're going to institutionalize it.

Finally, HPFMs reported that the importance of select university tenets (innovation, education, service), the mission, and its potential alignment with IPE principles would facilitate IPE implementation and sustainability. Participant 1 reported that he uses the tenets to help promote IPE and said:

> So, I've actually sort of started taking advantage of the tenants of the university. And incorporating those five tenets into talks when I'm talking to stakeholders, whether inside the school or talking to other people. Across school lines through the university…and the fact that service and innovation and education are all you know equally represented in tenants is really quite useful.

Faculty service to the students and service-learning activities were recognized as facilitators of IPE development. Participant 4 said:

> I do think we can definitely build upon that dedication that I was talking about…the dedication of the faculty to serve the students. And I think we have faculty that really do value service-learning opportunities. We can work more on building IPE activities through some of the service-learning things that are already happening at the university.

Participant 5 reported that IPE would benefit the students, benefit the community, and align well with the mission and said:

> And I think that, you know, at the end of the day, if the university is genuine about where they're wanting to go, I think they'll find that more people will be involved in these types of developments. Because again, it's extremely beneficial for the students. It's beneficial for the community, and it fits in line with our mission.

Participant 7 compared the benefits of IPE to those of the original organizational service mission and said:

> I think that the sisters, you know, and their passion for the community ... I think it really links so far as a facilitator. Linking with community organizations to have our students do interprofessional work … I think it's a perfect marrying of providing that service, but also allowing our students to work together in those teams and in real-life settings.

Discussion

The interview transcripts were analyzed and coded using Hofstede's dimensions of culture theory and the lens of how the dimensions contributed to organizational capacity to change. Based on the literature review, Hofstede's dimensions of culture theory, and my research questions, I identified buy-in, change, collaboration, culture, IPE, power differential, resistance, and uncertainty as a priori codes. All a priori codes evolved when analyzing the data as well as additional codes.

Findings suggested that HPFMs did not have a consistent understanding of IPE. Only three participants referred to the WHO definition of IPE and the IPEC core competencies. Remaining participants described IPE very differently, and one participant was not familiar with the term. All HPFMs reported IPE to be important, but some perceived it to be an extra activity that increased workload without recognition and conflicted with other priorities. The findings demonstrated that a mix of factors contributed to perceptions about organizational culture. Professional-centric practice persisted within the health professions schools with most HPFMs reporting primary focus on their own curricula. Additionally, some HPFMs reported hierarchic practices that increased power differentials within the schools and between them. Some HPFMs

perceived that adherence to traditional roles and profession-centric practices reduced faculty and administrative support for IPE implementation and reduced capacity to overcome logistical challenges.

But HPFMs also reported strong support for the university tenets, especially related to service. Most HPFMs described service-learning activities and service to learners as highly valued behaviors. Also, HPFMs cited administrative and faculty support for the university's tenets of service and innovation as a key cultural factor that could enhance IPE implementation.

Five themes evolved from responses to the research questions (a) divergent vision, (b) sporadic support, (c) educational silos, (d) IPE influencers, and (e) strong service ethos. The first three themes identified factors within the culture that inhibited organizational capacity to change. The fourth and fifth themes addressed factors within the culture that could facilitate organizational change. In the following sections, I will summarize the findings from the interviews. In the discussion of the results, I will describe the inconsistencies in HPFMs' understanding and vision about IPE, factors contributing to sporadic support for IPE, and examples of educational silos. I will conclude with descriptions of contributions made by IPE influencers and a discussion of individual and organizational commitment to service that could help support and sustain IPE implementation.

Divergent vision. The first dominant theme, divergent vision, was related to Research Question One but also affected the organization's culture and capacity to change. HPFMs inconsistently defined IPE, had an inconsistent understanding of what

types of activities constituted IPE, and had unclear expectations about the outcomes of IPE. This lack of consistency and clarity prevented the organization from developing a shared vision.

Sporadic support. The second dominant theme, sporadic support, confirmed that members at the site perceived problems like those identified in the literature, including discomfort with IPE techniques, high faculty workload, and inconsistent administrative support. Additionally, current leadership vacancies added to HPFMs' uncertainty about whether IPE efforts would be supported in the future. This theme related to Research Questions Two, Three, and Four. Sporadic support affects both individual attitudes and perceptions about the culture. Attitudes toward IPE were influenced by perceived individual burden compared to perceived support. The level of support also affects HPFMs' perceptions about organizational culture and capacity to change. Lack of knowledge about IPE contributed to the lack of shared vision, but also lack of support. Being unfamiliar with the goals, benefits, and related teaching methods of IPE made faculty members uncomfortable with the approach. That discomfort transitioned to a lack of buy-in.

Educational silos. The third dominant theme, educational silos, related to the third and fourth research questions, which addressed organizational culture and IPE implementation. The five professional schools at the site sit in five separate physical locations. Geography resulted in physical educational silos, but profession-centric cultures within the professional schools contributed to the presence of philosophical educational silos as well. The associated persistence of traditional hierarchies and

attitudes about collaboration, competition for resources, and territorial behavior opposed efforts at IPE implementation. Educational silos also promoted departmental priorities over those associated with IPE implementation.

IPE influencers. The fourth dominant theme, IPE influencers, related to all four research questions. There was a small group of early IPE adopters at the site represented four of the five professional schools. Though their progress had been slow and sometimes frustrating, they had helped other HPFMs understand what IPE is, and had influenced both departmental and university attitudes toward IPE. This group already knew about potential barriers and pitfalls of IPE implementation and could help the university avoid them. They also knew what had worked at the site and had studied what had worked for other organizations and could use this knowledge to move the project forward.

Because IPE influencers had been working on projects already, they could help the site develop a shared vision. Their work had helped them learn the culture of their own schools as well as those of other schools. They had witnessed the positive effect of past projects and could share those results with stakeholders to generate interest. Their experience and training were beginning to be recognized by others within the organization. Lastly, because they had worked with IPE projects, they had thought more about IPE and were further down the path to having a vision for a sustainable program at the site.

Strong service ethos. The final dominant theme, strong service ethos, related to Research Questions Two, Three, and Four. Participants related personal attitudes about the benefits of IPE to their own service ethics. They identified the university tenet of

service as widely embraced within the organizational culture and strongly supported by the administration. Nearly all participants noted that IPE aligned with the tenet of service and would be supported by the service ethos. Several participants recommended partnering with the other university departments to seek out, implement, and track IPE service-learning opportunities.

Negative Case Analysis

Negative case analysis evaluates the strength and frequency of cases that do not fit with evolving themes with strong cases requiring further investigation (Burkholder et al., 2016). Although I did not encounter an entirely negative case, one participant was not familiar with the term IPE. Instead, the participant used the term interdisciplinary education. Though the participant did not refer to the with, from, and about associated with IPE, the goals, activities, and benefits were very similar to those described as IPE. Participant 5 described previous interdisciplinary experience:

> I have done interdisciplinary education with (multiple groups). But they're primarily within the school. I've yet to have an opportunity to expand outside the school. Most of the activities are community-based engagement. So, we've designed service-learning projects within classes where one class would cover one portion of the activity. And then, my class would cover another portion of the activity. We would plan a design plan, implement, and evaluate those activities across the board.

The participant also reported many of the same challenges to implementation as the other participants, including lack of time and recognition for developing activities,

few opportunities for training, and inconsistent administrative support. Though the terminology was different, and the courses in which the students were enrolled were different, the benefits and challenges expressed by this participant were very similar to those expressed by the other participants in the study. Therefore, I included the participant's answers in the analysis.

Evidence of Quality

Although they represented different professional schools, several participants identified similar perceptions about how the organizational culture of their professions and the site affected IPE implementation, including the presence of power differentials, the presence of educational silos, a lack of administrative support and time for IPE, the contribution of IPE champions, and the importance of service in the organizational mission. These common perceptions between the professional schools provided reliable triangulation. As the data collection and analysis process evolved, I reflected on my own biases, considered how I might be influencing the data analysis. I recognized that I needed to keep an open mind about what type of final project would be appropriate. Finally, I conducted member checks by summarizing my findings about the data gathered in the interviews and sharing them with participants (see Appendix C). All participants responded, and, following clarification with one participant, confirmed that my analysis of faculty member perceptions about the culture and IPE was as intended by the participants.

Conclusion

My data revealed five themes that aligned with the Hofstede's dimensions of culture theory as it relates to organizational capacity to change (a) divergent vision, (b) sporadic support, (c) educational silos, (d) IPE influencers, and (e) strong service ethos. These themes related to Hofstede's dimensions of culture and how they increase or decrease organizational capacity to change, depending on the strength of each dimension within the culture (see Table 3).

Table 3

Effect of Themes on Cultural Dimensions and Capacity to Change

Theme	PDI	IND	UAI	LTO	Capacity to change
Divergent vision		+	+		↓
Sporadic support			+	-	↓
Educational silos	+	+			↓
IPE influencers		-	-	+	↑
Strong service ethos		-	-	+	↑

Note. PDI = power differential index; IND = individualism vs collectivism; UAI = uncertainty avoidance index; LTO = long term orientation.

Divergent Vision

Divergent vision at the site about what IPE is and how to implement it was negatively affecting implementation. Shared assumptions and attitudes within a group help move information across the organization and support members' work toward a common goal (Brewer et al., 2018; Buller, 2015; Dee & Leisyte, 2017). The absence of collective understanding allows for individual interpretation and could promote the

persistent interest of the individual over that of the group. Cultures that value individualism over collectivism are less likely to change (Hofstede et al., 2010). Further, unclear expectations about IPE can increase uncertainty regarding how to proceed. Discomfort with uncertainty is also associated with decreased organizational capacity to change (Hofstede et al., 2010). The combination of increased IND and increased UAI related to varied perceptions and expectations reduced the organizational capacity to implement change necessary to develop an IPE program.

Sporadic Support

The factors contributing to sporadic support affected the organization's ability to change. Persistence of traditional professional roles, especially with ongoing acceptance of associated hierarchies, increased the PDI within the university and resulted in an increased emphasis on individual or departmental needs versus organizational needs (IND). High workloads resulted in faculty focus on immediate tasks and reduced LTO. The perception of IPE activities as extra affected the workload for faculty and learners but also undermined their importance. Finally, lack of knowledge, lack of administrative support and upcoming changes in leadership created a sense of uncertainty at individual and organizational levels (increased UAI). Increased PDI or IND indexes reduce the likelihood of organizational change as does a decreased LTO (Hofstede et al., 2010). Also, faculty members who perceive a lack of buy-in from those in leadership roles could adopt like attitudes and further decrease buy-in (Brewer et al., 2018).

Educational Silos

The persistence of educational silos supported more profession-centric attitudes and resulted in increased IND. Competition for resources among the schools separated the organization into groups, further promoting an "us-versus-them" attitude (increased IND). Additionally, continued separation of the schools allowed ongoing perceptions about power differentials that affected faculty willingness to work together. High IND and high PDI are associated with decreased organizational capacity to change (Hofstede et al., 2010).

IPE Influencers

The presence of IPE influencers within the organization could have a positive influence on organizational capacity to change. Buller (2015) recommended that early adopters and those respected by peers be recruited as emergent leaders who can help guide change. Members of this group had a history with IPE and were recognized for their efforts. They could influence others and help develop and share a vision for change. Having a collective vision for the future (a) increases collectivism in relation to individualism, (b) decreases uncertainty, and (c) increases long term orientation, thereby increasing organizational capacity to change (Bajis et al., 2018; Bonello et al., 2018; Hofstede et al., 2010).

Strong Service Ethos

Latta (2015) said change potential increases when there is a high degree of alignment with organizational values and when the change includes stakeholder participation. Aligning IPE activities with the service ethos creates a powerful facilitator

for implementation. Service was already highly valued, and many faculty members were already familiar with and participating in service-learning. Positive attitudes toward service could increase a sense of collectivism and offset negative effects of individualism, thereby increasing organizational capacity to change.

Summary

The purpose of this project was to understand HPFMs' perceptions about IPE and how those perceptions might be influenced by the organizational culture at the university under study. For this study, I used a basic qualitative methodology and developed semistructured questions to interview eight purposefully selected HPFMs. I ensured the ethical protection of participants by providing informed consent and communicating with them individually using password-protected e-mail. I scheduled private interviews using videoconferencing software at the convenience of the participants. I used first-cycle elemental coding methods (in vivo and values coding) to initially code the data and second-cycle axial coding to identify themes. I provided accuracy and credibility of results through use of recorded interviews, field notes, triangulation, negative case analysis, and member checks.

Challenges to IPE implementation at the site were created by perceived power differentials, individualism, focus on short term goals, and uncertainty. Conversely, the work done by early adopters had the potential to guide vision and develop longer-term goals that would increase collective effort and reduce uncertainty. The widespread commitment to service could promote change by increasing collective spirit and linking service-learning goals to IPE. The data revealed five themes that aligned with the

Hofstede's dimensions of culture theory as it relates to organizational capacity to change (a) divergent vision, (b) sporadic support, (c) educational silos, (d) IPE influencers, and (e) strong service ethos.

In the next section, I will discuss the development of a white paper project that used research findings to help the site implement and sustain an IPE program. The research results indicated that the site needed to develop a shared vision for IPE, provide consistent support for IPE program development, and increase unity within the organization to be successful. They also needed to recognize and utilize existing resources to fortify efforts.

Section 3: The Project

Introduction

The purpose of this qualitative study was to understand HPFMs' perceptions about IPE and how those perceptions might be influenced by the organizational culture at the university. In this section, I describe the project, which was a position paper titled, "Leveraging Culture to Facilitate Change: A Success Plan for Implementing Sustainable Interprofessional Education" (Appendix A). The position paper was developed using the research results, the grounding theory, and current literature related to the topic. I begin with a description of the goals and rationale for the project, followed by a review of the literature and a description of the recommendations. Finally, I describe the project evaluation plan and the implications for social change.

The project for this study was a white paper. White papers, sometimes called *position papers*, are used to inform stakeholders about a problem and persuade them regarding recommendations (Campbell & Naidoo, 2017). In the white paper, I first described the problem of organizational culture influencing perceptions about IPE implementation at the university. Next, I discussed Hofstede's dimensions of culture theory as the grounding theory for the study and discussed methodology. I finished with recommendations for IPE implementation based on the results of the study, the grounding theory, and current literature.

Rationale

White papers, sometimes called *position papers* or *policy briefs*, are used to share information about and make recommendations to resolve specific problems. Used

initially to distribute military policy, the white paper has been adapted by other industry leaders to identify problems specific to an organization, present them in language that is understandable by organization stakeholders, and share information about solutions (Powell, 2012; Willerton, 2012). The white paper for this project contributed to understanding how organizational culture was affecting the university's capacity to implement and sustain an IPE program. Rather than directing action, white papers present information on possible solutions so the organization can evaluate options and make informed decisions (Powell, 2012). The white paper for this project included three recommendations aimed at facilitating sustained implementation of IPE.

The recommendations for the white paper were developed from current literature, the grounding theory, and the themes that evolved from the research. Five themes evolved relating to organizational culture (a) divergent vision, (b) sporadic support, (c) educational silos, (d) IPE influencers, and (e) strong service ethos. The first three themes related to a negative influence of organizational culture on IPE implementation. Varied perceptions about what constitutes IPE and what to expect of it have resulted in a lack of shared vision about IPE implementation. High faculty workloads, competing priorities, and uncertainty about the approach have contributed to sporadic support off IPE. The combination of multiple campuses, varied schedules, individual program demands, and adherence to traditional professional roles has resulted in physical and philosophical educational silos. The fourth and fifth themes demonstrated that there were components of the organizational culture that could facilitate IPE implementation. Though IPE implementation had been less than expected at the site, a grass-roots group of faculty

members had developed IPE activities and could serve as IPE influencers to help guide implementation. Finally, there was perception that the widespread support of the university tenet of service could provide a natural pathway for IPE activities that could help sustain implementation.

Review of the Literature

The first section of the literature review addressed the use of the white paper to effect organizational change. The second section discussed strategies for organizational change and sustainability with focus on education, stakeholder motivation, and incorporating organizational culture. For this literature review, I searched the Walden library database for peer-reviewed articles dated 2016–2020, using keywords including *attitude change, change, change culture, change leadership, change management, community engagement, higher education, healthcare, health professions, interprofessional education, IPE implementation, organizational culture, persuasion, policy brief, position, paper, professional development, service-learning,* and *white paper*. Additionally, I searched the literature resource sections of professional healthcare organizations associated with IPE training, including the NLN, INACSL, Society for Simulation in Healthcare, the Institute for Healthcare Improvement (IHI), IPEC, the National Center for Interprofessional Practice, and the National Academy of Medicine (formerly IOM). Finally, I set up notices and reviewed recommendations using Google Scholar resources.

White Papers as Tools for Change

The white paper was the chosen genre for this project. Pershing (2015) defined the white paper as a "form of an essay that uses facts and logic in a persuasive way to recommend and promote a solution to a particular problem" (p. 2). White papers can be employed to help others understand an issue better, to address a specific problem, or to facilitate improved job performance (Pershing, 2015). White papers create new knowledge through (a) collection of further information about an issue, (b) refinement and clarification of information, and (c) generation of new ways to understand the issue (Rotarius & Rotarius, 2016). The white paper is also highly adaptive regarding target audience and delivery options (Campbell & Naidoo, 2017; Powell, 2012). In my search, I found white papers shared in professional journals, on websites, at conferences, and through e-mails and listservs.

White papers are increasingly used by healthcare and higher education organizations to inform stakeholders and help shape policy. A literature search using *Thoreau* and the terms *white paper, healthcare,* and *higher education* revealed over 234,000 results. Many professional and educational organizations include sections on their websites for white papers that focus on the specific concerns of their members. For example, to address the issue of physician burnout, the National Academy of Medicine shared a white paper titled "Fired Up or Burned Out" (Diamond, 2017), and the IHI shared a white paper titled "IHI Framework for Improving Joy in Work" (Perlo et al., 2017). A search of the Harvard School of Public Health website revealed over 4,500 results using the terms *white paper* and *health* with topics addressing healthcare

leadership, emergency management, health access disparity, and more. Organizations also promote the development of white papers to help meet goals. One of the responsibilities of the INACSL research committee (2020) is to "develop research white papers as needed for the association" (para. 2). The IHI (2020) developed the IHI Innovation Series, a collection of white papers aimed to "further [their] mission of improving the quality and value of health and healthcare" (IHI White Papers, para. 1). These examples demonstrate that the white paper is widely used to promote change in health professions higher education.

White papers require a combination of superior writing and presentation skills to be effective. The well-written white paper begins with presenting established evidence about the problem, followed by logical arguments for a solution (Pershing, 2015). Although the author may recommend a solution, Campbell and Naidoo (2017) noted that, for the white paper, "persuasion is secondary to informing" (p. 99) and cautioned that stakeholders could dismiss strong vigorous attempts at persuasion. Wong, Green, and Bazemore (2017) identified four steps to composing a white paper (a) define the problem, (b) state the policy, (c) make your case, and (d) discuss the effect. Further, the white paper must be brief and visually appealing. Wong et al. (2017) described the policy brief as a focused discussion of a problem and solution and recommended that the author come to the point quickly. Powell (2012) suggested that the author "cut to the chase" (p. 100) to keep the attention of busy readers. The white paper includes formatting not typically seen in a scholarly article. The judicious use of graphics, color, captions, and space adds visual interest and keeps the reader from skipping important information (Powell, 2012).

Campbell and Naidoo (2017) recommended that white papers include formatting sophistication like that of a business report but cautioned that excessive use of formatting tools could cause the document to be perceived as a brochure. Finally, the white paper must meet the editorial guidelines for the intended publication (Rotarius & Rotarius, 2016; Wong et al., 2017). This combination of brevity, visual appeal, and adherence to publishing guidelines increases the chance that the white paper will be shared and read.

Though the general goal of white papers is to identify problems and recommend solutions, the approach for writing them varies depending on the specific audience and the nature of the article. Rotarius and Rotarius (2016) created structural frameworks for two types of white papers, conceptual and empirical. Conceptual papers examine conjectural theories and require that the writer discuss options, recommendations, and implications for the future (Rotarius & Rotarius, 2016). Empirical papers describe quantitative data analysis and require that the writer address methodology, analysis, conclusions, and ability to generalize the data to the topic or population of interest (Rotarius & Rotarius, 2016). Both types of papers provide abstracts, address the background of the issue, and support the position with literature, exhibits, and references (Rotarius & Rotarius, 2016). Powell (2012) and Willerton (2012) noted that white papers are highly flexible and can be adapted to the situation and audience. As my project used qualitative, rather than quantitative research, I adapted the empirical approach to include discussion of my research and make recommendations.

The traditional marketing process for writing white papers fits well for higher education and healthcare purposes. Rotarius and Rotarius (2016) described a project

aimed at adapting the business white paper model for healthcare administration students. Campbell and Naidoo (2017) offered five recommendations for developing and presenting white paper content that could be adapted for other industry (a) begin with the problem, (b) present a solution, (c) issue a call to action, (d) establish credibility, and (e) address legal guidelines. The problem should be described objectively to avoid the perception of bias (Powell, 2012; Wong et al., 2017). Description of the solution should be presented in a soft-sell way, include a description of limits and sustainability (Campbell & Naidoo, 2017; Powell, 2012; Willerton, 2012). The call to action may be direct or indirect, should restate the goal, and should motivate stakeholders to exercise their power to make a change (Campbell & Naidoo, 2017; Hilton & Anderson, 2018). Citing resources that support recommendations and sharing stories of others who have achieved success through similar actions adds credibility to the white paper (Campbell & Naidoo, 2017; Powell, 2012; Rotarius & Rotarius, 2016). Lastly, the white paper should include necessary references or copyright notices and clearly identify the author and the sponsor (Campbell & Naidoo, 2017). Most of the white papers I researched included these components.

The white paper genre was an appropriate choice for my project. I identified a problem and studied it through my research. My data analysis and additional review of literature helped me identify potential solutions to the problem. The white paper approach allowed me to create a brief that could identify the problem, offer solutions, issue a call to action for stakeholders, and discuss the effect. The visually appealing and brief format of

the white paper genre made it easier to share information through multiple platforms and increased the likelihood that it would reach the intended audience.

Strategies for Implementing Sustainable IPE

This portion of the literature review addressed information related to recommendations made in the white paper as related to the research findings and Hofstede's dimensions of culture theory. The research results suggested that the culture of the university contributed to decreased organizational capacity to change, which manifested as decreased IPE implementation. Specific themes related to less than desired IPE implementation were divergent vision, sporadic support, and persistence of educational silos within the organizational culture. These conditions result in increased individualism, more significant power differentials, increased uncertainty avoidance, and reduced long term orientation. But there were also cultural components that could facilitate IPE, implementation including the presence of early IPE adopters in the organization and a strong service ethos among the faculty. Utilizing these resources could unify the vision and increase collective spirit, which are associated with increased capacity to change.

The literature review on strategies for implementing IPE is divided into four sections. It begins with a general discussion of change management principles related to Hofstede's dimensions of culture theory. The remaining sections address information supporting the specific recommendations outlined in the project including: (a) developing an organizing team; (b) educating faculty, staff, and administration regarding IPE; and (c)

using service-learning to link the IPE curriculum to the strong service ethos within the culture.

Change management principles. Exploring and adopting effective change management principles would help the university navigate the process of implementing its IPE plan. Kotter (2008) described a model for change that includes eight steps (a) establish a sense of urgency, (b) create a guiding coalition, (c) develop a change vision, (d) communicate the vision for buy-in, (e) embower broad-based action, (f) generate short term wins, (g) never let up, and (h) incorporate changes into the culture. Components of this model were present in recommended approaches to implement change in higher education and healthcare, including the use of the white paper. For example, establishing and communicating a sense of urgency was cited as a first step in developing IPE readiness (NLN, 2015). Dang, Nice, and Truong (2017), Hilton and Anderson (2018), Mossman (2018), and the NLN (2015) recommend forming implementation teams with early adopters to lead IPE implementation efforts. Stakeholder buy-in and intrinsic motivation were cited as essential for implementing change (HPAC, 2019; Hilton & Anderson, 2018; Kezar, Gehrke, & Bernstein-Sierra, 2018; Martin & Mate, 2018; Mossman, 2018; NLN, 2015; Ratka, Zorek, & Meyer, 2017; Terry, Zafonte, & Elliott, 2018). Recognizing, communicating, and celebrating progress were identified as motivators to help organizations reach their goals (Hilton & Anderson, 2018; Malone, 2019; Mc Cannon et al., 2017; Perlo et al., 2017).

The approach to organizational change has transitioned from a structured, management-driven approach to a more fluid, team-driven approach. Buller (2015) said

organizations should phase out traditional approaches to change where change is manufactured and adopt a culture of innovation that focuses on people and processes to grow change organically. Hilton and Anderson (2018) described adaptive change that "relies on people's commitment to adopt new attitudes, competencies, beliefs, and behaviors" (p. 5) and recommended using a people-driven approach that emphasizes valuing each individual's contribution to help promote organizational transformation. Kezar, Gehrke, and Bernstein-Sierra (2018) described communities of transformation in which members with shared goals create cultural and transformational change despite challenging environments.

The role and distribution of power with change has also evolved. Heimans and Timms (2018) said the "old power" was like money, something to be hoarded by a few, jealously guarded and used as a weapon (p. 2). A more effective approach to power is to view it like an electrical current that can be channeled through the organization so that people can work together to accomplish a shared goal (Heimans & Timms, 2018; Hilton & Anderson, 2018). Teams working in organizations where power is distributed have higher capacity to generate change through engagement, discussion, and establishment of new value systems (Kezar et al., 2018). To support the transition from a hierarchical to a distributed power dynamic Hilton and Anderson (2018) recommended four methods (a) create a shared purpose by collaboratively defining the work of the group, (b) develop a distributed leadership structure in which work is interdependent, and no one person or group holds all the power or accountability, (c) establish explicit norms for the team, and (d) celebrate when people cede power.

Organizational culture affects change management approach and is affected by the change. The best change management approach is custom fit to the unique needs of the organization (Barr, Gray, Helme, Low, & Reeves, 2016; Hilton & Anderson, 2018; Martin & Mate, 2018; Ratka et al., 2017). Bond and Blevins (2019) said that considering the culture is essential when championing change and that governing structures found in higher education often create resistance to change. The NLN (2015) said organizational culture could be leveraged to develop an IPE curriculum and recommended that, when establishing a sense of urgency, leaders spend time crafting a message that is aimed at a change in culture. Mossman (2018) said that for sustainability, teams need to work on innovations that are tied to the mission. Once a change is implemented, it needs to be incorporated into the culture. Buller (2015) said that "the biggest mistake change managers make is assuming that once a new initiative is well underway, they don't need to attend to it anymore" (p 10). To be sustained, change needs to be incorporated into the new culture and is best tied to the mission of the organization (Buller, 2015). Over time, stakeholders will reconcile old information with the new and generate new paradigm that is perceived as normal (Buller, 2015; Kezar et al., 2018; Morgan, Bowmar, McNaughton, & Flood, 2019).

The general change management principles described above are related to my project and can be used to implement the recommendations in the white paper. Focus on teams, and the collective contribution of their members increases collectivism (decreased IND) and enhances the organizational capacity to change (Hofstede et al., 2010). Transitioning to a distributed power dynamic decreases PDI and promotes organizational

capacity to change (Hofstede et al., 2010). In the next sections, I will address literature related to establishing an implementation team (guiding coalition), providing IPE education for the stakeholders (developing and communicating a shared vision), and linking the IPE curriculum to the organizational cultural values (incorporating the change into the culture).

Creating a transformation team. The first recommendation in the white paper was to create an IPE implementation team to lead the change. Creating an implementation team that is representative of the people within the organization can help the organization succeed in the short term and sustain the change over time (Hilton & Anderson, 2018). Considerations informing the team included team composition, team size, and guidelines for how the team will function. The team should be comprised of early adopters, opinion leaders, administrators, board members, and internal and external stakeholders affected by the change (Buller, 2015; Hilton & Anderson, 2018; Mossman, 2018; NLN, 2015). Early adopters and those who have lived experienced with IPE have insight into challenges of problems and are more able to develop creative ways to solve them (Hilton & Anderson, 2018; Martin & Mate, 2018; Mc Cannon et al., 2017). Administrative support is vital for implementing change through the generation of buy-in, resource allocation, support of team decisions, and institutionalization (HPAC, 2019; Martin & Mate, 2018; Mossman, 2018; NLN, 2015; Ratka et al., 2017; Terry et al., 2018). Internal and external stakeholders are those who have a shared interest in solving a problem and are best suited to determine priorities and create a plan for change (Hilton & Anderson, 2018; Mc Cannon et al., 2017; Mossman, 2018).

In addition to membership, the university would need to determine the size of the initial team and a plan for expansion. Martin and Mate (2018) said that it is more effective to provide a few people with more time to plan than to offer many people little time to plan. Though it is important to include members who have lived experience with the problem, it is also important to gather additional stakeholder perspectives and avoid being exclusive (Barr et al., 2016; Hilton & Anderson, 2018; Martin & Mate, 2018; NLN, 2015). Also, inviting those interested or curious about IPE could promote buy-in and generate additional support. Belcher, Tormola, and Rucker (2020) said that efforts at attitude and behavioral change are more effective when people already agree with the change and that recruiting those already "leaning in" (p. 10) can result in greater results. The team would eventually expand as the project builds momentum. Buller (2015) said recruiting additional team members in the implementation phase allows task delegation to share the increased workload and generates additional buy-in. The white paper recommendation advised the university to begin with a core team of IPE influencers, key administrative personnel, and representatives from partnering departments and organizations. As the project evolved, additional implementation teams would be created to support the unique needs of the project.

To promote success, the team would need to establish guidelines for how it would function. First, the team would establish clear objectives for its work. For best outcomes, team goals should be specific to the local problem, aimed at narrowing the gap between the current and the desired state of performance, prioritized, flexible in nature, and articulated and clearly communicated to team members and other stakeholders (Hilton &

Anderson, 2018; Martin & Mate, 2018; Mc Cannon et al., 2017; Mossman, 2018; NLN, 2015). Second, participation guidelines would be addressed, including voluntary or mandated membership and level of autonomy. Hilton and Anderson (2018), Kezar et al. (2018), and Terry, Zafonte, and Elliott (2018) agreed that team effectiveness is higher when members are intrinsically driven, rather than directed to participate. The team's transformative capacity is enhanced when team members are encouraged to co-create, have a safe forum in which to work and communicate, and are free from coercion (Hilton & Anderson, 2018; Kezar et al., 2018; Martin & Mate, 2018). Finally, the team would determine how it would measure and communicate its work. Measures should be specific to the team goals, operationally defined, co-designed by team members, and validated to assure that they measure what was intended (Hilton & Anderson, 2018; Malone, 2019; Mossman, 2018; Smith et al., 2018). Transparently and regularly communicating team outcomes and achievements helps the organization celebrate successes and generates buy-in (Buller, 2015; Hilton & Anderson, 2018; Malone, 2019; Mc Cannon et al., 2017; Smith et al., 2018).

The transformation team would serve an essential role in the implementation of IPE at the site. A combination of motivated HPFMs and key administrators would allow those living the problem to provide insight for possible solutions and would promote support from those who could provide needed resources. Establishing clear team goals and guidelines would guide team members to do the necessary work. Communicating and celebrating successes would keep team members and other stakeholders motivated so that they can achieve the goal of sustained IPE implementation.

IPE training. The second recommendation from the white paper was to provide IPE training for faculty, staff, and administrators to facilitate preparation. Congdon (2016) said, "IPE faculty development is essential to provide well-designed high-quality IPE offerings to students" (p. 5). Faculty development addresses discomfort with IPE and helps stakeholders process change (Bond & Blevins, 2019; Truong et al., 2018). Ratka, Zorek, and Meyer (2017) described five characteristics common to organizations with well-established IPE faculty development programs (a) strong institutional support, (b) objectives and outcomes based on core IPE principles, (c) focus on consensus building, (d) flexibility based on institutional needs, and (e) inclusion of an assessment program. The following discussion will address literature related to IPE faculty development, including who to train, what to include in the training, when to train, how to conduct the training, how to evaluate the training and logistical support.

Who to train. The first step in developing faculty development for IPE would be deciding who should be trained. Though HPFMs would be the primary facilitators of IPE, implementation would involve school and senior-level administrators, staff from other departments, and community partners. Training together allows HPFMs, administrators, staff, and community partners to learn with, from, and about each other, promotes administrative support, and generates stakeholder buy-in (HPAC, 2019). Ratka et al. (2017) recommended a customized approach to training. Following a general IPE session, specific instruction will be provided to help individuals meet the implementation goal.

What to include, when, and how much to train. The content and type of training would evolve as implementation progresses. Initial training should occur before implementation and should focus on the four IPE core principles (a) values and ethics, (b) roles and responsibilities, (c) interprofessional communication, and (d) teams and teamwork, which are those expected of health professions students (HPAC, 2019; Ratka et al., 2017). Additional training should be ongoing and specific to the needs of the program as IPE is infused into the curriculum (HPAC, 2019; Lambrague, Mc Enroe-Petite, Fronda, & Obiedat, 2018; Morgan et al., 2019; NLN, 2015; Ratka et al., 2017). The frequency, timing, and duration of IPE professional development activities in schools with established IPE programs ranged from a single training offered just in time to years-long programs with monthly offerings (Congdon, 2016; Ratka et al., 2017).

How to conduct training and logistical support. The site would also decide how to conduct training, including the delivery platform, who would lead the training, and necessary logistical resources. When determining the delivery method and training venue, planners should consider the size of the audience, academic schedules, and participant time challenges (Ratka et al., 2017). Though face-to-face activities offer the best opportunity for collaboration, feedback, and generation of new ideas, incompatible academic and faculty schedules provide rare opportunities to meet (Bond & Blevins, 2019; Ratka et al., 2017; Terry et al., 2018). A more flexible professional development option would be creating a learning community. Learning communities allow faculty members facing a change to share ideas and provide feedback and are associated with

increased perception of support, fewer feelings of isolation, reduced faculty burnout, and improved capacity to implement something new (Terry et al., 2018).

Though commercial IPE faculty development programs are available, most training is provided by peer faculty who were involved in IPE as early adopters (Ratka et al., 2017). Faculty early adopters have lived with the challenge and with the philosophy, know the culture of the organization, and are more able to help stakeholders develop a shared vision for IPE implementation (Hilton & Anderson, 2018; Kezar et al., 2018; Martin & Mate, 2018; Mossman, 2018). Whether delivered by consultants or home-grown, IPE training should be conducted by a team that is interprofessional in nature and includes members from two or more health professions (Ratka et al., 2017). With all training approaches, planners need to ensure that adequate resources are available. The most utilized resource is time, followed distantly by training space, consulting fees, and training materials (Ratka et al., 2017).

Training evaluation. The final characteristic of an effective IPE professional development plan is the inclusion of an evaluation plan. Each IPE training session and the overall IPE professional development program should have clearly stated and measurable goals that are specific to the program and communicated to stakeholders (Martin & Mate, 2018; Mossman, 2018; NLN, 2015; Ratka et al., 2017). Like team goals, professional development measures should be specific to the program goals, operationally defined, and validated to assure that they measure what was intended (Hilton & Anderson, 2018; Malone, 2019; Mossman, 2018; Ratka et al., 2017).

In the white paper, I recommended that all stakeholders receive an orientation to IPE and that customized training be provided for select stakeholders as IPE implementation progresses. Training would be provided by a combination of consultants and IPE influencers from the site. The recommended initial training would present the most significant logistical challenge in that it would include many people in a face-to-face forum. Ongoing professional development would vary according to IPE implementation goals and could consist of face-to-face programs, web-based training, and the formation of learning groups. Finally, planners would identify measurable objectives and outcomes for each activity as well as the overall program.

IPE and service-learning. The final recommendation in the white paper was to use service-learning to link IPE implementation to the strong cultural service ethos. Research participants referred to core mission values of social justice and community service and identified service-learning as a natural pathway for IPE activities. Service-learning programs could include single-day events, such as health fairs, ongoing community-based clinic services, special populations projects, or be part of study abroad programs. Health professions students who participated in service-learning reported increased understanding of their own and other team members' roles and an appreciation for collaboration necessary to manage complex healthcare problems encountered in disadvantaged populations (Crawford et al., 2017; Foster & Pullen, 2016; Johnson & Howell, 2017; Jones, Li, Zomorodi, Broadhurst, & Weil, 2018; Mc Elfish et al., 2018; Packard, Ryan-Haddad, Monaghan, Doll, & Qi, 2016; Stetton, Black, Edwards, Schaefer, & Blue, 2019). When service-learning was combined with study abroad or international

programs, learners also developed trans-cultural self-efficacy and were more able to understand global health challenges (Cerny, Svien, Johnson, & Hansmeier, 2018; Crawford et al., 2017; Johnson & Howell, 2017).

Service-learning IPE requires planning and coordination not usually associated with traditional education. Successful service-learning IPE programs have in common: (a) clear objectives and timelines; (b) trained leaders; (c) open communication between faculty, learners, and community partners; (d) focus on collaboration; and (e) an evaluation plan (Dang, Nice, & Truong, 2017; Isibel et al., 2018; Stetton et al., 2019). Objectives should focus on IPEC core competencies as well as discipline-specific competencies and should be communicated in advance (Isibel et al., 2018; Stetton et al., 2019). Activities should be progressively built into the curriculum from observation to hands-on, to team-based activities and students should have completed some IPE activities before participating in international service-learning (Barr et al., 2016; Johnson & Howell, 2017). Evaluation should measure IPEC competencies but also address attitudes about IPE and use a combination of quantitative and qualitative methods (Packard et al., 2016; Stetton et al., 2019). For international and cross-cultural service-learning, cultural competency should also be measured (Cerny et al., 2018; Johnson & Howell, 2017; Mc Elfish et al., 2018).

In the white paper, I recommended using service-learning to link the strong cultural service ethos to the implementation of IPE. The community served by the site had a large population of disadvantaged and marginalized people who could be helped by service-learning IPE programs. Additionally, the site had a robust study abroad program

and multiple international campuses that could accommodate service-learning IPE. Service-learning efforts would be coordinated through the center for civic engagement and built into the curricula of all health professions programs. Health professions faculty would work with the center and community leaders to develop a collection of progressively involved IPE service-learning activities to promote both interprofessional and cultural competence.

Conclusion

In this review of the literature, I addressed selection of the white paper as the appropriate genre for my project and demonstrated support for the recommendations in the white paper. The white paper was the best genre for my project because it allowed me to make recommendations, based on Hofstede's dimensions of culture theory, the research, and related literature, that could help the site implement and sustain an IPE program. I made three recommendations: (a) create an IPE implementation team to lead the change; (b) provide IPE training for faculty, staff, and administrators; and (c) use service-learning to link IPE to the strong cultural service ethos. I demonstrated that each of the recommendations had previously helped other organizations achieve positive IPE outcomes.

Project Description

For this research project, the deliverable was a white paper that outlined specific recommendations to help the site develop a sustainable IPE program. Five themes evolved from the research results (a) divergent vision, (b) sporadic support, (c) educational silos, (d) IPE influencers, and (e) strong service ethos. Based on the research

results, the theory, and current literature, I offered three recommendations in the white paper: (a) create an IPE implementation team to lead the change; (b) provide IPE training for faculty, staff, and administrators to facilitate preparation; and (c) use service-learning to link IPE implementation to the strong cultural service ethos. These recommendations encompassed all five of the themes that evolved in the research.

IPE Implementation Team

Developing an IPE implementation team would address the themes of divergent vision, sporadic support, educational silos, and IPE influencers. Creating an IPE implementation team would help the site develop a common vision, provide more widespread and consistent support, and increase collaboration between the schools. Creating an implementation team that is representative of those who would be affected by the change could help the university succeed in the short term and sustain the change over time (see Hilton & Anderson, 2018; Martin & Mate, 2018; Mc Cannon, Margiotta, & Alyesh, 2017). The initial team would include early IPE adopters, school administrators, representatives of departments who have capacity to influence IPE and would coordinate IPE activities, and representatives from community partners. These are the people who would have the perspective necessary to identify gaps and measures to close them. As momentum builds, additional teams could be added, and tasks delegated to those with relevant expertise. Buller (2015) said recruiting additional team members in the implementation phase allows task delegation to share the workload and generates additional buy-in.

The team would need to establish guidelines for how it would function, including (a) team goals and outcome measures, (b) participation ground rules, and (c) a communication plan. Team goals would be specific to the local problem, aimed at narrowing the gap between the current and the desired state of performance, prioritized, flexible in nature, and articulated and clearly communicated to stakeholders (see Hilton & Anderson, 2018; Martin & Mate 2018; Mc Cannon et al., 2017; Mossman, 2018; NLN, 2015). Outcomes would also be specific to the project and team goals, operationally defined and co-designed by team members, and validated to assure that they measure what was intended (see Hilton & Anderson, 2018; Malone, 2019; Mossman, 2018; Smith et al., 2018). Participation would be voluntary, and team members would have a safe forum, absent of hierarchy or coercion, in which they can co-create freely (see Hilton & Anderson, 2018; Kezar, Gehrke, & Bernstein-Sierra, 2018; Martin & Mate 2018). Finally, regularly sharing progress and celebrating achievements will generate buy-in and further support project implementation (Buller, 2015; Hilton & Anderson, 2018; Malone, 2019; Mc Cannon et al., 2017; Smith et al., 2018).

IPE Training for Faculty, Staff, and Administrators

Providing IPE training for faculty, staff, and administrators to facilitate preparation would address the themes of divergent vision, sporadic support, educational silos, and IPE influencers. Ratka, Zorek, and Meyer (2017) said well-established IPE faculty development programs have strong institutional support, clear objectives and outcomes based on IPE core principles, are customized to meet institutional needs, and include an assessment program. Though HPFMs would be the primary facilitators of IPE,

the implementation would involve school and senior-level administrators, staff from other departments, and community partners. Training together allows HPFMs, administrators, staff, and community partners to learn with, from, and about each other, promotes administrative support, and generates stakeholder buy-in (HPAC, 2019). The result would be an increase in collective vision, broader support, and increased collaboration between the schools.

All stakeholders would receive an orientation to IPE, and customized training would be provided for select stakeholders as IPE implementation progresses. Initial training would occur before implementation and would focus on the four IPE core principles (a) values and ethics, (b) roles and responsibilities, (c) interprofessional communication, and (d) teams and teamwork, which are those expected of health professions students (see HPAC, 2019; Ratka, Zorek, & Meyer 2017). Additional training would be ongoing and specific to the needs of the program as IPE is infused into the curriculum (see HPAC, 2019; Ratka et al., 2017). Training would be conducted by an interprofessional team that would be comprised of consultants and local IPE influencers (early adopters) from the site.

Following an initial face-to-face training program, ongoing professional development would vary according to IPE implementation goals and could include face-to-face programs, web-based training, and the formation of learning groups. Though face-to-face activities offer the best opportunity for collaboration, feedback, and generation of new ideas, incompatible academic and faculty schedules provide rare opportunities to meet (Bond & Blevins, 2019; Ratka et al., 2017; Terry et al., 2018). A more flexible

professional development option would be the learning community. Learning communities allow faculty members facing a change to share ideas and provide feedback and are associated with increased perception of support, fewer feelings of isolation, reduced faculty burnout, and improved capacity to implement something new (Terry et al., 2018). With all training approaches, planners would need to ensure that adequate resources were available. The most used resource would be time, followed distantly by training space, consulting fees, and training materials (see Ratka et al., 2017).

The final characteristic of the IPE professional development program would be the inclusion of an evaluation plan. Each IPE training session and the overall IPE professional development program should have clearly stated and measurable goals that are specific to the program and communicated to stakeholders (Martin & Mate, 2018; Mossman, 2018; NLN, 2015; Ratka et al., 2017). Professional development measures would be specific to the program goals, operationally defined, and validated to assure that they measure what was intended (see Hilton & Anderson, 2018; Malone, 2019; Mossman, 2018; Ratka et al., 2017).

Linking IPE Implementation to the Service Ethos Through Service-learning

Linking IPE implementation to the service ethos through service-learning would address the themes of strong service ethos, divergent vision, sporadic support, and educational silos. Research participants cited strong support for the core mission values of social justice and community service and identified service-learning as a natural pathway for IPE activities. The community served by the site has a large population of disadvantaged and marginalized people who could benefit from service-learning IPE

programs. Incorporating the ethic of service to the community could increase collaboration and build support for IPE activities.

Health professions students who participated in service-learning IPE reported increased understanding of their own and other team members' roles and an appreciation for collaboration necessary to manage complex healthcare problems encountered in disadvantaged populations (Crawford et al., 2017; Foster & Pullen, 2016; Johnson & Howell, 2017; Jones, Li, Zomorodi, Broadhurst, & Weil, 2018; Mc Elfish et al., 2018; Packard, Ryan-Haddad, Monaghan, Doll, & Qi, 2016; Stetton, Black, Edwards, Schaefer, & Blue, 2019). When service-learning was combined with study abroad or international programs, learners also developed trans-cultural self-efficacy and were more able to understand global health challenges (Cerny, Svien, Johnson & Hansmeier, 2018; Crawford et al., 2017; Johnson & Howell, 2017).

Collaborating with the center for civic engagement to coordinate service-learning IPE activities would further support implementation by identifying opportunities and tracking participation. Service-learning efforts would be coordinated through the center and built into the curricula of all health professions programs. Health professions faculty would work with the center and community leaders to develop a collection of progressively involved IPE service-learning activities to promote both interprofessional and cultural competence. Service-learning programs would include single-day events, such as health fairs, ongoing community-based clinic services, special populations projects, or be incorporated into study abroad programs. The site has a robust study

abroad program and multiple international campuses that could accommodate international service-learning IPE.

Service-learning objectives would focus on IPEC core competencies as well as discipline-specific competencies and would be communicated in advance (see Isibel et al., 2018; Stetton et al., 2019). Activities would be progressively built into the curriculum from observation, to hands-on to team-based activities, and students would have completed some IPE activities before participating in international service-learning (see Barr et al., 2016; Johnson & Howell, 2017). Evaluation would measure IPEC competencies but would also address attitudes about interprofessional collaboration and using a combination of quantitative and qualitative methods (see Packard et al., 2016; Stetton et al., 2019). For international and cross-cultural service-learning activities, cultural competency would also be measured (see Cerny et al., 2018; Johnson & Howell, 2017; Mc Elfish et al., 2018).

The goals of the project were to (a) create a unified vision for change, (b) facilitate faculty and stakeholder preparation and motivation for IPE implementation, and (c) identify a pathway for creating a sustainable IPE program. Creating a guiding coalition, developing and communicating a change vision, and empowering broad-based action are associated with successful change (Kotter, 2008). Implementing the recommendations could help the site develop the unified vision, preparation, and support necessary to implement and sustain an IPE program.

I would present the white paper to key stakeholders involved in the delivery of health professions education at the site through face-to-face format or online discussion.

In the following sections, I discussed the needed resources, potential implementation barriers, and solutions for resolving obstacles. I also proposed an implementation timeline and discussed roles and responsibilities related to project implementation.

Needed Resources and Existing Supports

Needed resources for disseminating the white paper include administrative support, access to stakeholders, access to a presentation venue, access to videoconferencing software, and time. University leaders are supportive of IPE implementation and have already asked for contributions from HPFM faculty members. All HPFMs have access to videoconferencing software, and several classrooms on campus are configured to function as sharable presentation venues. Campus e-mail will be used to share information about the white paper presentation as well as a recording of the presentation and following discussion. Finally, stakeholders will need to make time to read the notice of presentation and either attend the face to face or the videoconference session or view the videoconference recording.

Implementing the recommendations contained within the white paper will require additional resources, including ongoing administrative and faculty member commitment, interdepartmental coordination and collaboration, funding, and time. University leaders have announced that they are committed to IPE implementation and had set aside time and money for IPE-related activities. There was a cluster of current IPE champions among HPFM faculty who could help generate additional stakeholder interest and support for ongoing programs. External motivation to implement IPE would be generated by the various accrediting agencies of health professions schools.

Potential Barriers and Solutions

Though IPE initiatives had administrative support and there was already a small group of early adopters among the HPFM faculty, there were potential barriers to presenting the white paper and to implementing the recommendations. The most significant barriers were related to workload, attitude, collaboration, coordination, campus geography, and time. Faculty members who were managing high workloads might not have attended or viewed the initial white paper presentation and might not have attended training or planning sessions. Those who adhered to traditional health professions relationships might have resisted or undermined IPE activities and opted for an ongoing uniprofessional approach. Coordinating activities to support schools in five different geographic locations and with multiple academic calendars would provide additional challenges. Faculty IPE training, IPE curriculum planning, and outcome evaluation would take the time that would need to be incorporated into already packed schedules.

The recommendations from the white paper, the formation of an implementation team, provision of IPE education, and linking the initiative to valued behaviors would help mitigate some of the potential barriers. Current early adopters and those who were supportive of IPE could serve as implementation team members to help share the vision and bring along the traditionalists and laggards. Further, crafting a team that equally represents all health professions schools would enhance collaboration and coordination between campuses. Providing education to both administrators and HPFMs would increase knowledge about the benefits of IPE and generate support. Incorporating IPE

into service-learning activities would help students and faculty advisors dually meet the university service-learning requirement and the IPE goals and potentially reduce the time burden.

Implementation Timeline

The implementation of this research project would be the presentation of a white paper to university administrators and HPFMs. Upon Walden University's approval of the doctoral study, I would coordinate with the provost and deans of the health professions schools to arrange a time and location for the presentation. Ideally, the presentation would occur during the opening week of the academic year when faculty had returned to campus, but classes had not yet started. Alternately, I could present the information a few weeks after the term had started and faculty members had launched their courses. I would create a brief audiovisual presentation to highlight the problem, the research results, and the recommendations. To accommodate HPFMs at other schools, I would share the meeting using videoconferencing software and record the session to allow for later viewing. Following the presentation of the white paper, I would work with stakeholders as requested to coordinate team building, faculty development, and curricular integration of service-oriented IPE.

Roles and Responsibilities

As the student researcher, my responsibility was to disseminate the research findings and related recommendations in the white paper. I would include initial dissemination and possible later dissemination to additional stakeholders as requested. I would also be responsible for helping promote the recommendations in the white paper.

As requested, I could serve as a resource person to support team formation, faculty development, and curriculum integration.

Project Evaluation Plan

The evaluation planned for this project was an outcomes-based evaluation. The Colorado Nonprofit Association (n.d.) described outcomes as "the measurable effects the program will accomplish" (para. 2). Outcome indicators can be measured quantitatively or qualitatively, and let stakeholders know whether the project is delivering expected results (Colorado Nonprofit Association, n.d.). Boulmetis and Dutwin (2011) described evaluation as "a systemic process of collecting and analyzing data" (p. 5) to make a decision or to determine whether objectives have been achieved. Evaluation should be considered throughout the planning and implementation of a project, rather than reserved as an end-of-project activity (Colorado Nonprofit Association, n.d.; De Silets, 2018; Kirkpatrick & Kirkpatrick, 2016). Kirkpatrick and Kirkpatrick (2016) identified three reasons to evaluate training programs "(a) to improve the program, (b) to maximize transfer of learning to behavior and subsequent organizational results, and (c) to demonstrate the value of training to the organization" (Chapter 1, para. 9). The goal of this project evaluation would be to maximize the transfer of IPE learning to behavior that resulted in the successful implementation of a sustainable IPE program.

The deliverable for this research project was a white paper aimed at informing stakeholders of the need to implement a sustainable IPE program and motivating them to take action. The overall goal of the project was to help the site implement a sustainable IPE program. In the white paper, I made three recommendations to facilitate sustainable

IPE implementation: (a) create an IPE implementation team to lead the change; (b) provide IPE training for faculty, staff, and administrators to facilitate preparation; and (c) use service-learning to link IPE to the strong cultural service ethos. As the recommendations focused heavily on training and aimed to promote a change in behavior that would result in a specific outcome, the Kirkpatrick model for evaluation would be an appropriate tool to use for evaluation.

The new world Kirkpatrick model focuses on Kirkpatrick's original four levels of training evaluation: reaction, learning, behavior, and results, but adds features to help organizations operationalize the levels for better outcomes (Kirkpatrick & Kirkpatrick, 2016). In the updated model, reaction is related to engagement, relevance, and satisfaction; learning includes the traditional knowledge, skills, and attitudes, plus confidence and commitment; behavior includes monitoring and encouragement; and results are measured by leading indicators and outcomes (Kirkpatrick & Kirkpatrick, 2016). Levels one and two address the quality of the training, whereas levels three and four address training effectiveness (Kirkpatrick & Kirkpatrick, 2016). Kirkpatrick and Kirkpatrick (2016) also recommended that planners initially consider the four levels in reverse when planning a training program, beginning with the end in mind. Once a training program is implemented, planners would evaluate levels closer to their numerical order, but the process may not be linear or strictly sequential (Kirkpatrick & Kirkpatrick, 2016). I addressed my evaluation plan in this manner.

Kirkpatrick and Kirkpatrick (2016) defined evaluation of results as the "degree to which targeted outcomes occur as a result of the training and the support and

accountability package" (Chapter 2, para. 6) and said that it is the most misunderstood and difficult evaluation level to achieve. Level Four evaluation includes evaluation of desired outcomes and assessment of leading indicators (Kirkpatrick & Kirkpatrick, 2016). To avoid confusion and creation of operational silos, Kirkpatrick and Kirkpatrick (2016) recommended that organizations create a single results statement that combines organizational purpose and mission with sustainable resource use. Those most familiar with the gaps and aims of the program are most prepared to identify project goals and outcomes that are custom fit to the needs of the organization and the project (Hilton & Anderson, 2018; Kirkpatrick & Kirkpatrick, 2016; Martin & Mate, 2018; NLN, 2015). Outcomes should be identified and shared early to generate interest and promote buy-in (Buller, 2015; Hilton & Anderson, 2018; Kirkpatrick & Kirkpatrick, 2016; Martin & Mate, 2018; Mc Cannon et al., 2017; NLN, 2015). Once the results statement is written, the organization should identify leading indicators, short-term measurements to determine whether the project is on track to achieve desired results (Kirkpatrick & Kirkpatrick, 2016). For the evaluation of the IPE implementation project, the guiding team would work together to create the results statement and the leading indicators and would share them with stakeholders early in the project. A recommended results statement would be to implement a sustained IPE program among the health professions schools through ongoing faculty and learner education and service-learning. The leading indicators would be measurable behaviors and benchmarks that would be scaffolded as the project progressed. Examples would be (a) 90% of HPFMs complete IPE orientation, (b) at least one IPE activity is included in each term for all levels of health professions

programs, (c) the center for civic engagement designates five or more IPE service-learning activities accounting for 20 or more hours that accrue toward the graduation requirement and are tracked through the service portal.

Kirkpatrick's Level Three, behavior, addresses how participants of a program apply what was learned once they return to their jobs (Kirkpatrick & Kirkpatrick, 2016). The traditional approach to level three evaluation was to ask participants at the time of training how they planned to change their behaviors in the future, based on what they learned (De Silets, 2018). However, De Silets (2018) recommended that this evaluation be conducted several months after the training to determine if behavior has genuinely changed. Kirkpatrick and Kirkpatrick (2016) said that behavior includes: (a) critical behaviors - those that are most important to achieve targeted outcomes; (b) required drivers - processes and systems that monitor, reinforce, and reward desired behavior; and (c) on-the-job learning with the expectation that individuals are accountable for their performance. Further, to identify critical behavior, planners must be familiar with the gap between the current state and the desired outcome (De Silets, 2018). For this project, the gaps between the current state and the desired outcome were that HPFMs and health professions students were not planning and participating in IPE activities. A critical behavior would be that faculty members and learners participated in IPE activities. Required drivers would be documentation of participation in IPE activities, allotting time for planning and engagement in IPE activities, the inclusion of IPE activities in faculty performance evaluations, and sharing of IPE success stories. On-the-job learning would

occur through peer mentoring, continued IPE professional development, and performance evaluation feedback regarding IPE activities.

Kirkpatrick's Level Two, learning, traditionally evaluated knowledge, skills, and attitudes gained with an activity and was typically conducted though survey at the time of training (De Silets, 2018). The new world Kirkpatrick model level two evaluation adds confidence and commitment, which are evaluated initially and through ongoing activities (Kirkpatrick & Kirkpatrick, 2016). For learning to be considered successful, participants would report that they gained knowledge and skills, that they believe the learning was important and relevant, that they think they can perform the skill on the job, and that they will perform the new skill on the job (Kirkpatrick & Kirkpatrick, 2016). Adding confidence and commitment to the learning evaluation ties learning to behavior and motivation and supports on-the-job learning that contributes to outcome achievement (Kirkpatrick & Kirkpatrick, 2016). To evaluate learning for this project, I would survey the audience following the presentation of the white paper and again a few weeks later. The initial survey would be conducted in person for the in-person audience and by Survey Monkey for those who attended the online presentation. In addition to asking about knowledge, skills, and attitudes, I would ask about confidence in the ability to use new knowledge and skills and commitment to making a change.

Level One, reaction, addresses program relevance, audience engagement, and customer satisfaction (Kirkpatrick & Kirkpatrick, 2016). Program relevance relates to whether the information can be used on the job and contributes to learning (Kirkpatrick & Kirkpatrick, 2016). The level of audience engagement is directly associated with the level

of learning (Kirkpatrick & Kirkpatrick, 2016). Though traditionally over-emphasized, customer satisfaction has a positive correlation with learning (Kirkpatrick & Kirkpatrick, 2016). Reaction is typically surveyed at the end of the educational presentation and focuses on the quality of the program, facilities, and the knowledge of the speaker (De Silets, 2018). Level one evaluation would be conducted through in-person and online surveys, depending on the presentation mode.

An overriding component in the new world Kirkpatrick model is ongoing monitoring and adjustment (Kirkpatrick & Kirkpatrick, 2016). Kirkpatrick and Kirkpatrick (2016) emphasized that planners monitor and adjust theirs programs based on results of level evaluations, stating that it is the monitoring and adjustments, or lack thereof, that lead to successes or failures. On-the-job behavior and leading indicators should be tracked and analyzed, so that changes can be made as necessary and evaluation revisited (Kirkpatrick & Kirkpatrick, 2016). Identifying and reinforcing above-standard behavior can enhance success (Kirkpatrick & Kirkpatrick, 2016).

The role of stakeholders is also important in evaluation. Stakeholder input and feedback are necessary to prepare for education, to reinforce new skills and knowledge on the job, and to enhance outcome achievement (De Silets, 2018). For the IPE implementation project, the initial stakeholders were HPFMs, health professions school and senior administrators, and department staff for the health professions schools as well as those departments involved in service-learning and civic engagement. Additional stakeholders would be health professions students, community partners, and ultimately, the clients for whom health professions school graduates would provide care. For

evaluating the deployment of the white paper, I would focus on sharing with the initial stakeholders as it would be premature to engage with those not yet involved. Before the presentation, I would ask for feedback regarding expected outcomes and behaviors and the preferred presentation approach, if necessary. Immediately following the presentation, I would deploy the survey to measure participant reaction and learning. Survey results could identify gaps in commitment and confidence or concerns about expected critical behaviors and drivers that could then be addressed in level three evaluation. Using this information, I could then work with stakeholders to monitor performance and adjust on-the-job support and further training to help meet the goal.

By using the new world Kirkpatrick model for evaluation, I would start with the end in mind to help align the training program and expected behaviors with the outcomes. The flexibility and interrelatedness of the four evaluation levels would allow me to monitor progress and make changes necessary to enhance success. Consulting with stakeholders would help me develop a presentation that is relevant, engaging, and motivating and would help identify areas where follow-up or adjustment is needed. Addressing these components in my evaluation plan would increase the likelihood of success.

Project Implications

Local Implications

I expect that the white paper that was developed as a result of this doctoral research project would have positive implications for the site. The literature and Hofstede's dimensions of culture theory suggested that organizational culture could

impede or enhance the capacity to change. The research demonstrated that organizational culture was influencing perceptions about the ability to implement and sustain IPE at the site and that there were barriers and facilitators within the culture. The white paper highlighted barriers and facilitators within the culture. It made recommendations on how to mitigate the barriers and enhance the capacity of the facilitators to promote the implementation of a sustainable IPE program. If the site implemented the recommendations, the outcome would be that the site developed and sustained an IPE program resulting in producing health professions graduates who would be collaborative-practice ready and who could provide safer and more cost-effective patient care.

Larger Context Implications

More broadly, by developing and sustaining an IPE program, the site would contribute to the achievement of the *quadruple aim*. Designed as an approach to optimizing healthcare system performance, the IHI (2012) developed the *triple aim* of improving the patient healthcare experience, improving population health, and reducing per capita healthcare costs. Training programs for IPE focused on developing collaborative capacity so help achieve those goals. Sikka, Morath, and Leape (2015) noted that the *triple aim* did not acknowledge the role of the healthcare workforce and described a fourth aim of improving the experience of providing care. Though not officially accepted by the IHI, this fourth aim has been embraced by practitioners and is described as finding "joy and meaning in the work of healthcare" (Sikka et al., 2015, p. 608). The collaboration and teamwork competencies resulting from IPE have been linked to increased satisfaction in work and reduced practitioner burnout (American Association

of Critical-Care Nurses [AACN]W, n.d.; Perlo et al., 2017; Shell, Newton, Soltis-Jarrett, Ragaisis, & Shea, 2019; Smith et al., 2018). In turn, improving satisfaction in work improves clinician well-being resulting in improved quality, safety, satisfaction, and reduced healthcare cost (Shell et al., 2019). By learning about and implementing an IPE program, the health professions faculty would benefit from improved satisfaction in work as would the health professions graduates.

Conclusion

This section included a description of a white paper developed as a result of the basic qualitative research project exploring HPFM perceptions of how organizational culture influenced the capacity to implement and sustain an IPE program. The white paper was informed by five themes that emerged from the study, Hofstede's dimensions of culture theory and current literature related to the white paper genre, and IPE implementation strategies. In this section, I also described the project, including goals, rationale, potential barriers, implementation timeline, and the project evaluation plan. In the next section, I will share overall reflections and conclusions about the project and my growth as a scholar during my educational journey.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

Project Strengths

The strengths of this project were that the white paper project genre was appropriate for the project and that the project addressed the lack of sustained IPE implementation at the study site. Campbell and Naidoo (2017) said that a white paper needs to identify a problem, identify potential solutions, prompt action, and establish credibility. In the white paper, I identified the problem that organizational culture was affecting HPFM perceptions about organizational capacity to implement IPE, and I presented recommendations that were grounded in theory, based on the research project and current literature, and tied to the cultural values of the organization. Using research and current literature to develop recommendations provided credibility for the recommendations. Linking recommendations to the cultural values of an organization helps prompt action and increases the success of a change initiative (Latta, 2015).

Another benefit of the white paper was that it provided flexibility to provide solutions custom fit to the problem and the organization. Powell (2012), Pershing (2015), and Willerton (2012) said that though a white paper should provide options for solutions, it is unwise to advocate for a position or pressure the audience toward a specific solution. Hilton and Anderson (2018) said change is facilitated when members of an organization who are most familiar with the problems contribute to the solutions. Although my white paper informed the site about the problem and provided possible solutions, I avoided being overly prescriptive in the recommendations. Instead, I encouraged the site to use its

resources to develop a program that was unique to the culture of the organization and served the needs of students and the local population.

Project Limitations

The white paper identifies a problem and presents potential solutions but does not guarantee action. Although the initial presentation of the white paper could provide interest and initial buy-in, without ongoing administrative and individual support for professional development, planning, and implementation, the recommendations would not be implemented or sustained. The presence of physical and operational silos within the organization and competition for resources presented the most significant challenges. To help generate support, I would assist with developing an IPE professional development curriculum and IPE curricular integration in the health professions programs. As the coordinator of the clinical learning center in the School of Nursing and Health Professions, I could also assist with IPE simulation development as an adviser to the IPE implementation committee.

Another limitation of this white paper project was that the basic qualitative research study was based on a small sample of health professions faculty and may have missed the perspectives of others within the organization. For qualitative research, Ravitch and Carl (2016) recommended that those who know the most about the phenomenon be recruited. For this study, I contacted the deans of each school who then made recommendations for study participants. However, there may have been additional HPFMs who would have liked to participate but who were not included in the deans' recommendations. Eight HPFMs participated, and the data showed good triangulation.

However, the data cannot be generalized to include the perceptions of the broader health professions faculty or other stakeholders within the organization and community who would be involved in IPE implementation. To gain additional information about how stakeholder perceptions about the capacity to implement and sustain IPE, I could conduct a broader quantitative or mixed-methods study of the HPFM faculty, administrators, department staff, and community partners.

Recommendations for Alternative Approaches

The problem in this study was that the health professions programs at a private university in a large southwestern city had not implemented a sustained IPE program. The problem was explored as an organizational cultural problem from the perspective of the HPFMs. An alternate approach to addressing the themes identified in the study would be to build a professional development program.

Creating a professional development program for stakeholders at the site would address the themes that evolved from the findings (a) divergent vision, (b) sporadic support, (c) educational silos, (d) IPE influencers, and (e) strong service ethos. It would also meet the original project goals, which were to (a) create a unified vision for change, (b) facilitate faculty and stakeholder preparation and motivation for IPE implementation, and (c) identify a pathway for creating a sustainable IPE program. Conducting appropriately timed and scaled professional development activities would help stakeholders develop a shared vision and increase support for the IPE program. Learning more about IPE would increase motivation and could also tap the creative energy of stakeholders directly working with the problem. More informed stakeholders could find

ways to link the program to the mission that could increase sustainability. Finally, providing IPE professional development would strengthen the voice of IPE influencers by informing other faculty, staff, and administrators of the benefits of IPE and developing additional IPE champions. It would not be feasible to build a program in isolation, as IPE professional development requires the input of an interprofessional team.

Scholarship, Project Development, and Leadership and Change

This research project has helped me grow as a scholar and a practitioner. At the time of my entry into the program, I was already an experienced educator working in a leadership role and had developed multiple projects. However, I had not had formal training in some areas, particularly research. Participating in the program and completing the doctoral research project helped me understand the role of research in education and in project development and the importance of sharing results to effect change.

Scholarship

When participating in graduate-level scholarship, students are expected to "ask good questions, build on the work of others, formulate an effective and feasible research design, and communicate results in ways that matter" (Walker, Golde, Jones, Buechel, & Hutchings, 2008, p. 4). This project required those actions of me. First, I identified a problem to study and developed the research questions as part of my research proposal. The most challenging part of this step was aligning the components of the proposal, including the problem, purpose, rationale, significance, theoretical foundation, and research approach.

Next, I designed and, following IRB approval, conducted the research study. The IRB review was required by Walden University as well as the site and helped me understand the importance of having an effective and feasible research design and the importance of protecting research participants. Using a basic qualitative approach, gathering a purposeful sample of participants, and conducting semistructured qualitative interviews helped me generate the data I needed to answer the research questions.

The project, a white paper, helped me communicate results in a manner that could help the site resolve the problem. Both the research proposal and the subsequent doctoral project were built on the research of others. Conducting the literature reviews for the proposal and the project allowed me to compare my findings to the work of others and understand how to communicate best what I learned. Also, addressing the necessary resources, existing support and potential barriers, and including a proposal for implementation helped me understand that research must be shared to have an effect. Finally, I learned to appreciate the value of qualitative research as a powerful contributor to the body of knowledge about IPE. Though the conclusions could not be generalized to other universities, they were important to the success of the site's IPE initiative.

Project Development

The main thing that I learned about project development during this research project is that project development is best approached from a team perspective. The very nature of my research topic, IPE, was that collaboration is necessary to achieve the best outcomes. I initially anticipated that I would plan an IPE professional development program or health professions IPE curriculum, but the literature and evidence

demonstrated that a project aimed at working together should be designed by people working together. Although I understand that the doctoral project is done somewhat in isolation, moving forward, I would want to gain the perspective and input of my professional peers when developing a project. Also, the inclusion of those affected by the project adds clarity, promotes buy-in, and increases the chance of success.

The white paper project was the right choice for the individually developed doctoral project as I could use related theory, current literature, and research results to identify potential solutions. Researching white paper literature helped me understand how white papers can be used to promote action and effect change. I also found value in developing a product that was understandable and appealed more to the general population. By developing a white paper that included the problem, the research summary, and evidence-based recommendations, I was able to help the stakeholders at the site identify solutions and motivate them to take action to develop a sustainable IPE program.

Leadership and Change

This doctoral project has increased my understanding of what is required of a leader in education. Having started my career in healthcare and currently serving in a school of health professions, I have always recognized that evidence should drive practice. I also understand that evidence is frequently generated and shared by leaders in the health professions to identify and promote opportunities to improve. What I understood less was how much work was involved in generating and sharing evidence and aligning the evidence with proposed changes.

Having completed the research study and the doctoral project, I understand more fully the role that leaders have in the generation and dissemination of data. I recognize that leaders must have the discipline to identify problems that are meaningful to the organization and analyze them objectively to generate usable data. The results and recommendations can then be shared with stakeholders so that they can work together to develop solutions that work for the organization. Encouraging input from peer leaders and other stakeholders results in the best outcomes.

Reflection on the Importance of the Work

Providing interprofessional education is a high priority in the healthcare environment. The WHO (2010) called upon higher education institutions to provide IPE as a means to develop a collaborative-practice ready healthcare workforce with the capacity to provide higher quality patient care. Though much research had been done on this topic, the site had not successfully implemented a sustained IPE program. The white paper contributed to this effort by identifying factors that affected organizational capacity to change and making recommendations for IPE implementation. Specifically, the project identified themes based on Hofstede's dimensions of culture theory and HPFM perceptions about how organizational culture affected the capacity to implement IPE. The findings added to the knowledge of how organizational culture affects the capacity to change. At the site, the findings and recommendations provided insight on how the organization could enhance the success of their IPE initiative. Aligning recommendations with the organizational culture of the site would further enhance success.

I already perceived myself to be a life-long learner but completing the doctoral project has helped me understand what it means to be a true scholar and educational leader. I learned the value of clarifying a problem and then studying that problem deeply to identify possible solutions. During my coursework and research, I participated in other unrelated research projects at the site and managed a grant aimed at improving clinical experiences for nurses. I was able to apply the skills gained through my doctoral course work to progress more smoothly through those projects. I also learned the value of scholarly collaboration. Although I completed the doctoral project as a single researcher, the experience helped me identify many topics of interest and potential research partners. I am excited to move forward into those projects that could further improve the quality of education at our institution.

Implications, Applications, and Directions for Future Research

The white paper that evolved from my research revealed implications for positive social change and generated ideas for future research. Social change begins with individual potential that grows with passion, education, and acquisition of knowledge (Walden University, 2017). The power of social change is amplified further through collaboration and team building so that networks of motivated people can address problems within the organization, the community, or the society (Walden University, 2017). The literature demonstrated that IPE contributed to the development of collaborative-practice capacity of health professions graduates and resulted in improved healthcare outcomes. The theory and research showed that the site was struggling to make necessary changes to implement and sustain an IPE program. Failing to implement

and sustain an IPE program could result in the site's graduates not developing collaborative-practice competencies expected of health professionals and missed opportunities for improved healthcare outcomes. The project focused on how the organizational culture affected HPFMs' perceptions of the capacity to implement IPE. Based on the research, the theory, and current literature, the white paper informed stakeholders about cultural barriers and facilitators of change. The white paper also made recommendations on how the site could succeed with IPE implementation.

This project has the potential to effect positive social change at the individual, the organizational, and the societal level. A central benefit of IPE implementation is the development of collaborative practice. Collaborative practice is associated with improved healthcare outcomes and improved efficiency but is also associated with an improved experience of providing care, better work-life balance, and finding joy in work (AACN, n.d.; HPAC, 2019; Perlo et al.; Smith et al., 2018). By developing an IPE program, both faculty members and health professions graduates would personally benefit from improved work-life balance and would be more likely to find joy in their work. Increased collaborative capacity would benefit the organization by helping it become more efficient in instruction for health professions students. At the societal level, patients would benefit from the improved quality of care provided by collaborative-practice ready health professions graduates.

Though the results of this study could not be generalized to other organizations, some of the recommendations could be useful to other schools that are struggling with IPE implementation. The literature and research suggested that organizational culture be

considered when developing an IPE program. Faculty development, curricula, and learning activities should be custom fit to the organization's specific needs and tied to the mission. Using these strategies could help other institutions succeed in their IPE implementation programs.

The scope of my study was limited to one site and focused on HPFM perceptions. Additional research could be done to explore the perceptions of health professions students about their IPE experiences. As the IPE program is implemented and students participate in activities, their experiences and perceptions could drive further improvement in the site's IPE program. Another recommendation for practice would be to measure stakeholder perceptions about the efficacy of IPE professional development.

Conclusion

In this research study, I identified that, despite strong evidence supporting IPE and prior studies addressing challenges of implementing programs, the site was struggling to make changes necessary to implement and sustain an IPE program. What was not known was how perceptions of organizational culture were influencing the capacity to change. To learn more, I conducted a basic qualitative study to explore HPFMs' perceptions about how organizational culture was influencing IPE implementation. The study and data analysis resulted in a white paper that identified five themes within the culture, which were barriers to and potential facilitators of IPE implementation. The barriers to IPE implementation were divergent vision, sporadic support, and educational silos. The presence of IPE influencers within the organization and the strong cultural service ethos had the potential to enhance IPE implementation.

Based upon these themes, I made three recommendations to help the site implement an IPE program including: (a) create an IPE implementation team to lead the change; (b) provide IPE training for faculty, staff, and administrators to facilitate preparation; and (c) use service-learning to link IPE to the strong cultural service ethos.

Completing this project helped me grow personally and professionally. I developed a deeper appreciation for the value of qualitative research and how it can be used to identify problems that might be missed with quantitative methods. I also increased my understanding of how collaboration affects organizations and individuals, not only in the healthcare field but in other industries as well. I was interested in interprofessional practice before beginning this project but learning more about the topic has fueled that interest. During the research process, reading the literature and learning from my peers resulted in many ideas for projects and collaborations. I purposely refrained from participating in some activities before data collection and analysis, as I wanted to avoid bias or the perception of bias. Also, during my journey, I discovered like-minded peers within our organization and have been invited to join in the effort to facilitate IPE. Now that I am near completion, I expect to participate more fully in our organization to help our IPE program thrive.

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Appendix A: The Project

Leveraging Culture to Effect Change: A Success Plan for Implementing Sustainable Interprofessional Education

Cynthia Voyce

Executive Summary

Interprofessional education (IPE) is defined by the World Health Organization (WHO; 2010) as activity in which "students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes" (p. 10). Collaborative healthcare teams help achieve the quadruple aim of improved patient care experience, improved population health, reduced per capita healthcare cost, and attaining joy and meaning in work (Interprofessional Education Collaborative [IPEC], 2016, Smith et al., 2018). Yet, higher education institutions continue to struggle with sustained IPE implementation. This study addressed the problem that organizational culture was influencing IPE implementation at the site. The purpose of this paper is to present the findings and recommendations related to a doctoral research study of eight health professions faculty members' (HPFMs') perceptions related to organizational culture and IPE implementation. Guided by Hofstede's dimensions of culture theory, research questions focused on (a) personal experience and attitudes about IPE, (b) perceptions of organizational culture, and (c) perceptions of how organizational culture was affecting IPE implementation. Data analysis revealed five themes **(a) divergent vision, (b) sporadic support, (c) educational silos, (d) IPE influencers, and (e) strong service ethos.** These findings, the theoretical concepts, and strategies described in the review of literature led to the following recommendations for developing a sustainable IPE program:

- Create an IPE implementation team to lead the change.
- Provide IPE training for faculty, staff, and administrators to facilitate preparation.
- Use service-learning to link IPE to the strong cultural service ethos.

The Problem

Although the benefits of interprofessional education (IPE) are well documented, health professions faculty the university have not implemented a sustained IPE program. The university has identified and begun to address logistical challenges to IPE, such as coordination of academic calendars and multiple campuses, but has not developed a collaborative culture among the health professions schools. The problem addressed by this white paper is that organizational culture is influencing IPE implementation at the research site.

IPE Implementation Challenges

- **Late, inconsistent, or optional participation**
- **Failure to address "with, from, about"**
- **Siloed programs and curricula**
- **Conceptual to operational gaps**
- **Resistant culture**

Of the five health professions schools at the university, four offer graduate-level programs, including optometry, osteopathic medicine, pharmacy, and physical therapy. The school of nursing and health professions serves undergraduate and graduate-level students in the athletic training, kinesiology, nuclear medicine, nursing, and rehabilitative science programs. The health professions schools are located on five separate campuses, and, outside of annual school-wide meetings, health professions faculty from each school do not routinely meet with those from other schools. Student activities are also isolated, with each group staying mostly on its designated academic campus. A previous grant to promote IPE at the university supported temporary IPE activities, but once the grant ended, the IPE effort was not continued (Faculty Member A, personal communication, February 14, 2018). Since then, efforts at IPE have been met with resistance from both faculty and administrators (Faculty Member B, personal

communication, December 5, 2018). Though a few faculty members at the university continued to schedule events with students from multiple programs, IPE has not been institutionalized.

Many organizations struggle to implement IPE in education and in practice in the United States and internationally. Although successful programs introduce IPE concepts early, incorporate the WHO expectations of learning with, from, and about each other, scaffold the activities across the curriculum, and require participation, other programs address IPE as an optional activity, offer isolated events that are introduced too late in the curriculum to promote positive interprofessional attitudes, or falsely categorize parallel multiprofessional activities as IPE (Brewer, Flavell, Trede, & Smith, 2018; De Vries, Reuchlin, de Maaijer, & van de Ridder, 2017; Frantz & Rhoda, 2017; Homeyer, Hoffmann, Hingst, Oppermann, & Dreier-Wolfgramm, 2018; Institute of Medicine, 2015; Ketcherside, Rhodes, Powelson, Cox, & Parker, 2017; Konrad, Cavanaugh, Rodriguez, Hall, & Pardue, 2017; Maree et al., 2017; Van Kuiken, Schaefer, Flaum-Hall, & Browne, 2016). The National League for Nursing (NLN; 2015) identified a nation-wide lag in the implementation of IPE in health professions schools. Mladenovic and Tilden (2017) said few institutions of higher education have implemented meaningful and sustained IPE and that “programmatic silos remain the norm” (p. 10). Frantz and Rhoda (2017) described a gap between the conceptualization of IPE and the operationalization of IPE, resulting in a lack of sustained implementation. Grymonpre et al. (2016) said though there is widespread support for IPE initiatives, institutions of higher education struggle with sustained implementation. Even if IPE is implemented within academic programs, the lack of a collaborative practice culture in clinical affiliate organizations offers few opportunities for students to transfer their learning to the real world (Brewer et al., 2018). Though some academic institutions have successfully implemented IPE programs, widespread and sustained IPE implementation remains elusive.

Importance

Health professions programs face the ongoing challenge of keeping up with evolving healthcare practice. The cultures of academic organizations are different than business or military organizations, requiring a different approach to change (Buller, 2015). Further, each academic institution is unique in its structure, relationships, priorities, and history (Bolman & Deal, 2014). Academic reform relies on a critical understanding of organizational culture (Bajis, Chaar, Basheti, & Moles, 2018). The significance of this study is that once perceptions are identified, institutional leaders could address cultural barriers and facilitators for the implementation of an IPE program. Building upon existing cultural attitudes that support IPE would create a stronger foundation for implementation by tying current values to IPE initiatives. Identifying and exploring attitudes that create barriers to IPE would help leaders clarify misconceptions and promote the benefits of IPE that are supported by evidence. Successful implementation of an IPE program could help produce healthcare professionals who practice collaboratively, provide higher quality and safer patient care, and are more satisfied in their work.

Hofstede's Dimensions of Culture Framework

The study, analysis, and recommendations in this paper were informed by Hofstede's Dimensions of Culture Framework. Hofstede, Hofstede, and Minkov (2010) defined culture as "the collective programming of the mind that distinguishes the members of one group or category of people from others" (p. 6) and described culture as a multilayered phenomenon that changes with experience. Inner layers (values) are shaped by early life experiences, not as easily observed, and are less likely to change, whereas outer layers (practices) are more influenced by experiences later in life, more easily observed, and are

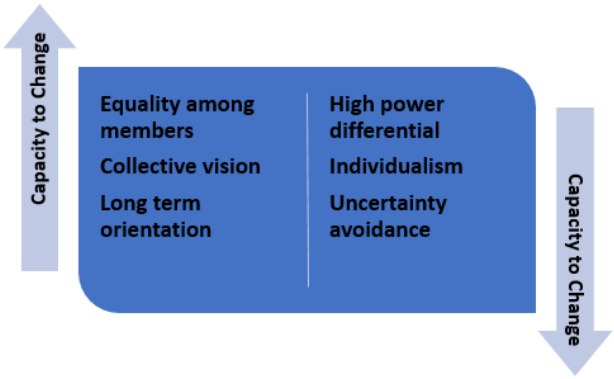
more transient depending on group membership (Hofstede et al., 2010). Organizations are comprised of individuals who are part of national, cultural, social, and professional societies and are consequently influenced by the values of those societies (Hofstede et al., 2010). The collective values of the society can create barriers to or facilitate organizational change, influencing human resource policy, the structural makeup of the organization, or political climate (Bajis et al., 2018; Bonello, Morris, & Muscat, 2018; Stanley & Stanley, 2019). Hofstede et al. (2010) identified six dimensions of culture that influence an organization's response to change (see Table 1).

Table 1

Hofstede's Dimensions of Culture

Dimension	**Acronym**	**Definition**
Power-distance index	PDI	The degree of inequality within the society or organization and the acceptance of the uneven power distribution.
Individualism versus collectivism	IND	The degree to which the interest of the individual prevails over the interest of the group.
Masculinity versus femininity index	MAS	How gender role patterns are defined and overlap within the society or organization.
Uncertainty avoidance index	UAI	The extent to which members of the group feel threatened by the new or unknown.
Long term orientation	LTO	The tendency to which members of the group foster virtues to the future instead of the past or present (short-term orientation).
Indulgence versus restraint	IVR	The tendency to allow gratification of basic and human pleasures to enjoy oneself compared to the tendency to curb gratification

Organizations with high PDI, IND, MAS, UAI, and IVR scores are less likely to change whereas groups with high LTO scores are more likely to change (Bajis et al., 2018; Berger et al., 2017; Bonello et al., 2018; Morris, & Muscat, 2018; Verma, Griffin, Dacre, & Elder, 2016).



By exploring the perceptions of HPFMs about IPE and how culture influences implementation of IPE at the university, I determined how selected cultural dimensions (PDI, IND, LTO, UAI), as defined by Hofstede, could facilitate or inhibit implementation of IPE at the study site.

Purpose and Design

The purpose of this research study was to understand HPFM perceptions about IPE and how the organizational culture was influencing implementation. I used a basic qualitative approach to address that reality is perceived differently by each member of a group and that people who live or work together may develop shared expectations, meanings, understandings, goals, and mindsets that create a cultural lens for the group (Buller, 2015; Burkholder et al., 2016; Hofstede et al., 2010; Rubin & Rubin, 2012; Yazan, 2015). The research questions for this study were:

1. How do HPFMs at the research site define IPE?
2. How would HPFMs at the research site describe their attitudes toward IPE?
3. How do HPFMs at the research site describe the organizational culture?
4. How do HPFMs at the research site describe how organizational culture affects the implementation of IPE?

I conducted semi-structured, one-on-one interviews with eight HPFMs. I used purposeful and group sampling to identify those who would know the most about IPE and provide rich information that could reveal group patterns (Ravitch & Carl, 2016; Patton, 2015). The sampling criteria were that the HPFMs taught full-time in one of the health professions programs and that they had worked with the site for two years or more. The sample represented four of the five health professions schools. All participants provided informed consent before participating in the study. The form shared the voluntary nature of the study, background information, compensation, and contact information. I obtained IRB approval from Walden University and the site before the study.

Results

Following word-for-word transcription, I coded the interviews using in vivo, values, and axial coding. The analysis of data revealed five themes:

- Divergent Vision
- Sporadic Support
- Educational Silos
- IPE Influencers
- Strong Service Ethos

Divergent Vision

The first dominant theme, divergent vision, is related to Research Question One but also affects the organization's culture and capacity to change. HPFMs inconsistently define IPE, have an inconsistent understanding of what types of activities constitute IPE, and have unclear expectations about the outcomes of IPE. Only three participants described IPE using components of the WHO definition. Those more

> **It doesn't mean that you sit students from two professions or more professions into a lecture hall and lecture to them. It has to be that they interact with each other. It has to involve that they are really having a quality experience where they're talking with one another. They're learning about each other's professions. (Participant 4)**

familiar with IPE described some past IPE approaches as inadequate or inappropriate to meet the IPE criteria of students learning with, from, and about each other. They reported a misperception that merely being together in an activity or an environment met the criteria. Participants also cited a lack of clarity about outcomes as a hindering factor for IPE implementation. Without clear goals, both faculty members and learners are uncertain about what to expect of the experience and what types of activities will help achieve them.

This lack of consistency and clarity prevents the organization from developing a common vision Shared assumptions and attitudes within a group help move information across the organization and support members' work toward a common goal (Brewer et al., 2018; Buller, 2015; Dee & Leisyte, 2017). The absence of collective understanding allows for individual interpretation and could promote the persistent interest of the individual over that of the group. Further, unclear expectations about IPE can increase uncertainty regarding how to proceed. The combination of increased IND and increased UAI related to varied perceptions and expectations reduces the organizational capacity to implement change.

Sporadic Support

The second dominant theme, sporadic support, confirmed that members at the site perceive problems like those identified in the literature, including discomfort with IPE techniques, high faculty workload, and inconsistent administrative support. Additionally, current leadership vacancies added to uncertainty about whether IPE efforts would be supported in the future. This theme related to Research Questions

Two, Three, and Four. Sporadic support affects both individual attitudes and perceptions about the culture. Attitudes toward IPE are influenced by perceived individual burden compared to perceived support. The level of support also affects HPFMs perceptions about organizational culture and capacity to change.

Lack of knowledge about IPE contributed to the lack of shared vision, but also to lack of support. Being unfamiliar with the goals, the benefits, and related teaching methods of IPE made faculty members uncomfortable with the approach. That discomfort transitioned to a lack of buy-in. Nearly all participants reported a high workload and lack of time as barriers to developing and implementing IPE in their programs. Faculty struggled with fitting IPE into already tight schedules. They reported that IPE activities were perceived as "extra" by faculty and by students, especially when they occurred outside of regular class time and no credit was given for their work. Weighed against required and recognized activities, IPE was not viewed as a priority. Though some HPFMs reported high interest from their deans, they questioned whether administrators would support changes necessary to implement and sustain an IPE program and whether they would have a voice in decisions. As with individual workloads, competing requirements within the schools and at the university affected perceptions about IPE support and sustainability. Also, HPFMs expressed concern regarding the IPE commitment of the university's future leaders. If those who would fill two key positions did not value IPE, support could evaporate, and initiatives could fail.

I think we actually are overwhelmed with day to day tasks…expectations of research, expectations of in-house committee services. It becomes an added project that, in reality, is not a necessity. (Participant 5)

The factors contributing to sporadic support affect the organization's ability to change. Persistence of traditional professional roles, especially with ongoing acceptance of associated hierarchies, increases the PDI within the university and results in an increased emphasis on individual or departmental needs versus organizational needs (increased IND). High workloads can result in faculty focus on immediate tasks and reduce LTO. The perception of IPE activities as extra affects the workload for faculty and learners but also undermines their importance. Lack of knowledge, lack of administrative support, and upcoming changes in leadership create a sense of uncertainty at individual and organizational levels (increased UAI).

And for too many organizations, IPE is evenings, Friday afternoons, and Saturdays, instead of being integrated into the curriculum. (Participant 1)

An increased PDI or IND index reduces the likelihood of organizational change as does a decreased LTO (Hofstede et al., 2010). Finally, faculty members who perceive a lack of buy-in from those in leadership roles could adopt like attitudes and further decrease buy-in (Brewer et al., 2018).

Educational Silos

The third dominant theme, educational silos, relates to the third and fourth research questions, which addressed organizational culture and IPE implementation. The five professional schools at the site sit in five separate geographic locations. Geography created physical educational silos, but profession-centric cultures within the professional schools contributed to the presence of philosophical educational silos as well. The associated persistence in traditional hierarchies and attitudes about collaboration, competition for resources, and territorial behavior opposed efforts at IPE implementation. Educational silos also promote departmental priorities over those associated with IPE implementation. Participants reported that the persistence of traditional hierarchies and associated power differentials negatively affected faculty member attitudes, especially toward collaboration.

The geographical separation of the five schools inhibits the sharing of services and increases competition for resources. Competing schools and are sometimes perceived to leverage traditional attitudes to get what they want, and perceived unequal distribution of resources undermines cooperative IPE effort. Previous efforts at IPE implementation have been hindered by territorial behavior when faculty from one or another school may try to exert control over location or timing or content of the activity that is resisted by others. Further, the separate locations and independent functions of the professional schools allow little time for faculty communication or collaboration about IPE. Day to day demands of implementing program curricula take priority. Consequently, IPE efforts receive less attention.

> **I'm not sure that everybody in every profession has the same opinion of what collaboration among professions means. I'm not sure every school really values the collaboration with other professions. (Participant 3)**

The persistence of educational silos supports more profession-centric attitudes and results in increased IND. Competition for resources among the schools separates the organization into groups, further promoting an "us-versus-them" attitude (increased IND). Additionally, continued separation of the schools allows ongoing perceptions about power differentials that affect faculty willingness to work together. High IND and high PDI are associated with decreased organizational capacity to change (Hofstede et al., 2010).

IPE Influencers

The fourth dominant theme, the presence of IPE influencers within the organization, relates to all four research questions. This small group of early IPE adopters has championed IPE and represents most of the professional schools. Though their

progress has been slow and sometimes frustrating, they have helped other HPFMs understand what IPE is, and have influenced both departmental and university attitudes toward IPE. This group already knows about potential barriers and pitfalls and can help the university avoid them. They also know what has worked at the site and have studied what has worked for other organizations and can use this knowledge to move the project forward.

> **Linking with community organizations to have our students do interprofessional work…I think it's a perfect marrying of providing that service, but also allowing our students to work together in those teams and in real-life settings. (Participant 7)**

Because IPE influencers have been working on projects already, they can help the site develop a shared vision. Their work has helped them learn the culture of their own schools as well as those of other schools. They have witnessed the positive effect of past projects and can share those results with stakeholders to generate interest. Lastly, because they have worked with IPE projects, they have thought more about IPE and are further down the path to having a vision for a sustainable program at the site. Buller (2015) recommended that early adopters and those respected by peers be recruited as emergent leaders who can help guide change. Members of this group have a history with IPE and the capacity to influence others to develop a shared vision for change. Having a collective vision for the future (a) increases collectivism in relation to individualism, (b) decreases uncertainty, and (c) increases long term orientation, thereby increasing organizational capacity to change (Bajis et al., 2018; Bonello et al., 2018; Hofstede et al., 2010).

Strong Service Ethos

The final dominant theme, strong service ethos, relates to Research Questions Two, Three, and Four. Participants identified the university tenet of service as widely embraced

within the organizational culture and strongly supported by the administration. Nearly all HPFMs noted that IPE aligns with the tenet of service and would be supported by the ethos. Latta (2015) said change potential increases when there is a high degree of alignment with organizational values. Aligning IPE activities with the service ethos creates a powerful facilitator for implementation. Service is already highly valued, and many HPFMs are already familiar with and participate in service-learning. Positive attitudes toward service can increase a sense of collectivism and offset negative effects of individualism, thereby increasing organizational capacity to change.

Recommendations

Using themes generated from the research results, theories on organizational change, and current literature, I developed three recommendations for the IPE implementation process at the site. The first two recommendations, creating an implementation team and providing training for faculty, staff, and administrators, are aimed at informing stakeholders and developing a shared vision for change. The third recommendation, using service-learning to link IPE to the cultural service, ethos aims to institutionalize IPE and enhance sustained implementation.

Create an IPE Implementation Team

A carefully composed implementation team will help the university incorporate IPE into its culture. Creating an implementation team that is representative of those who will be affected by the change can help the university succeed in the short term and sustain the change over time (Hilton & Anderson, 2018; Martin & Mate, 2018; Mc Cannon, Margiotta, & Alyesh, 2017). The initial team should include early IPE adopters, school administrators, representatives of departments who will coordinate IPE activities, and representatives from community partners. These are the people who will have the perspective necessary to identify gaps and measures to close them. As momentum builds, additional teams should be added, and tasks delegated to those with relevant expertise. Buller (2015) said recruiting additional team members in the implementation phase allows task delegation to share the workload and generates additional buy-in.

The team will need to establish guidelines for how it will function, including (a) team goals and outcome measures, (b) participation ground rules, and (c) a communication plan. Team goals should be specific to the local problem, aimed at narrowing the gap between the current and the desired state of performance, prioritized, flexible in nature, and articulated and clearly communicated to stakeholders (Hilton & Anderson, 2018;

Martin & Mate 2018; Mc Cannon et al., 2017; Mossman, 2018; NLN, 2015). Outcomes should also be specific to the project and team goals, operationally defined and co-designed by team members, and validated to assure that they measure what was intended (Hilton & Anderson, 2018; Malone, 2019; Mossman, 2018; Smith et al., 2018). Participation should be voluntary, and team members should have a safe forum, absent of hierarchy or coercion, in which they can co-create freely (Hilton & Anderson, 2018; Kezar, Gehrke, & Bernstein-Sierra, 2018; Martin & Mate 2018). Finally, regularly sharing progress and celebrating achievements will generate buy-in and further support project implementation (Buller, 2015; Hilton & Anderson, 2018; Malone, 2019; Mc Cannon et al., 2017; Smith et al., 2018).

Provide IPE Training for Faculty, Staff, and Administrators

> **I think if we had an openness to, you know, or maybe just knowledge of this huge repository of information that we have at the National Center for Interprofessional practice and education. That we don't have to reinvent the wheel. I think that also, the literature about the barriers…there's a ton of it. And I think that if we, as a group, as faculty and administration, would consume some of that literature, we can use it to not reinvent the wheel and not make all the same mistakes and start at a good place. (Participant 7)**

Providing IPE training for faculty, staff, and administrators will facilitate preparation for implementation. Congdon (2016) described faculty development as essential to create high-quality IPE student experiences. Ratka, Zorek, and Meyer (2017) said well-established IPE faculty development programs have strong institutional support, clear objectives and outcomes based on IPE core principles, are customized to meet institutional needs, and include an assessment program. Though HPFMs will be the primary facilitators of IPE, the implementation should involve school and senior-level administrators, staff from other departments, and community partners. Training together allows HPFMs, administrators, staff, and community partners to learn

with, from, and about each other, promotes administrative support, and generates stakeholder buy-in (HPAC, 2019).

All stakeholders should receive an orientation to IPE, and customized training should be provided for select stakeholders as IPE implementation progresses. Initial training should occur before implementation and should focus on the four IPE core principles (a) values and ethics, (b) roles and responsibilities, (c) interprofessional communication, and (d) teams and teamwork, which are those expected of health professions students (HPAC, 2019; Ratka, Zorek, & Meyer 2017). Additional training should be ongoing and specific to the needs of the program as IPE is infused into the curriculum (HPAC, 2019; Ratka et al., 2017). Training should be conducted by an interprofessional team that could be comprised of consultants and local IPE influencers (early adopters) from the site.

Faculty early adopters have lived with the challenge and the philosophy, know the culture of the site, and are more able to help stakeholders develop a shared vision for IPE implementation.

(Hilton & Anderson, 2018; Kezar et al., 2018; Martin & Mate, 2018; Mossman, 2018).

Following an initial face-to-face training program, ongoing professional development would vary according to IPE implementation goals and could include face-to-face programs, web-based training, and the formation of learning groups. Though face-to-face activities offer the best opportunity for collaboration, feedback, and generation of new ideas, incompatible academic and faculty schedules provide rare opportunities to meet (Bond & Blevins, 2019; Ratka et al., 2017; Terry et al., 2018). A more flexible professional development option is the learning community. Learning communities allow faculty members facing a change to share ideas and provide feedback and are associated with increased perception of support, fewer feelings of isolation, reduced faculty burnout, and improved capacity to implement something new (Terry et al., 2018). With all training approaches, planners need to ensure that adequate resources are available. The most

utilized resource is time, followed distantly by training space, consulting fees, and training materials (Ratka et al., 2017).

The final characteristic of an effective IPE professional development plan is the inclusion of an evaluation plan. Each IPE training session and the overall IPE professional development program should have clearly stated and measurable goals that are specific to the program and communicated to stakeholders (Martin & Mate, 2018; Mossman, 2018; NLN, 2015; Ratka et al., 2017). Professional development measures should be specific to the program goals, operationally defined, and validated to assure that they measure what was intended (Hilton & Anderson, 2018; Malone, 2019; Mossman, 2018; Ratka et al., 2017).

Use Service-learning to Link IPE Implementation to Service Ethos

The final recommendation in this white paper is to use service-learning to link IPE implementation to the strong cultural service ethos, which would help institutionalize IPE. Research participants cited strong support for the core mission values of social justice and community service and identified service-learning as a natural pathway for IPE activities. Health professions students who participated in service-learning IPE reported increased understanding of their own and other team members' roles and an appreciation for collaboration necessary to manage complex healthcare problems encountered in disadvantaged populations (Crawford et al., 2017; Foster & Pullen, 2016; Johnson & Howell, 2017; Jones, Li, Zomorodi, Broadhurst, & Weil, 2018; Mc Elfish et

al., 2018; Packard, Ryan-Haddad, Monaghan, Doll, & Qi, 2016; Stetton, Black, Edwards, Schaefer, & Blue, 2019). When service-learning was combined with study abroad or international programs, learners also developed trans-cultural self-efficacy and were more able to understand global health challenges (Cerny, Svien, Johnson & Hansmeier, 2018; Crawford et al., 2017; Johnson & Howell, 2017).

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Crawford et al., 2017; Foster & Pullen, 2016; Johnson & Howell, 2017; Jones, Li, Zomorodi, Broadhurst, & Weil, 2018; Mc Elfish et al., 2018; Packard, Ryan-Haddad, Monaghan, Doll, & Qi, 2016; Stetton, Black, Edwards, Schaefer, & Blue, 2019

The community served by the site has a large population of disadvantaged and marginalized people who could benefit from service-learning IPE programs. Additionally, the site has a robust study abroad program and multiple international campuses that would accommodate service-learning IPE. Service-learning efforts would be coordinated through the center for civic engagement and built into the curricula of all health professions programs. Health professions faculty would work with the center and community leaders to develop a collection of progressively involved IPE service-learning activities to promote both interprofessional and cultural competence. Service-learning programs could include single-day events, such as health fairs, ongoing community-based clinic services, special populations projects, or be incorporated into study abroad programs.

Service-learning objectives should focus on IPEC core competencies as well as discipline-specific competencies and should be communicated in advance (Isibel et al., 2018; Stetton et al., 2019). Activities should be progressively built into the curriculum from observation, to hands-on to team-based activities, and students should have

completed some IPE activities before participating in international service-learning (Barr et al., 2016; Johnson & Powell, 2017). Evaluation should measure IPEC competencies but also address attitudes about interprofessional collaboration and use a combination of quantitative and qualitative methods (Packard et al., 2016; Stetton et al., 2019). For international and cross-cultural service-learning activities, cultural competency should also be measured (Cerny et al., 2018; Johnson & Howell, 2017; Mc Elfish et al., 2018).

Concluding Thoughts

The challenge of implementing and sustaining an IPE program is not unique to the site but is influenced by the unique culture of the organization. Study participants identified barriers to and facilitators of IPE implementation within the culture, including divergent vision, sporadic support, presence of educational silos, presence of IPE influencers, and a strong cultural service ethos. Failure to address barriers and optimize the use of existing resources could result in a continued delay of IPE implementation or lack of sustainability for programs developed.

Implementing recommendations in this paper could help the site develop a shared vision to prepare for, implement, and sustain its IPE program. Successful and sustained implementation of an IPE program could help the site produce healthcare professionals with the capacity to practice collaboratively, provide higher quality, safer, and more cost-effective patient care, and perceive joy in their work.

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Appendix B: Interview Protocol

Interview Protocol

Participant name:

Alphanumeric ID (pseudonym:

Date:

Start Time:

End Time:

Research Questions

RQ1 – Qualitative: How do health professions faculty at the research site define IPE?

RQ2 – Qualitative: How would health professions faculty at the research site describe their own attitudes toward IPE?

RQ3 – Qualitative: How do health professions faculty at the research site describe the organizational culture?

RQ4 – Qualitative: How do health professions faculty at the research site describe how organizational culture affects implementation of IPE?

Introductory Script

Thank you for taking time to meet with me today. The purpose of this qualitative study is to understand HPFMs' perceptions about IPE and how they might be influenced by organizational culture at the university under study. As stated in the consent form that you have signed this study is confidential and voluntary. You will not be identified by your real name but will be assigned an alphanumeric code. You may decline to answer any question you do not wish to answer and may withdraw from the study at any time.

During the interview, I will ask you questions related to your perceptions about IPE and how the academic culture at the university relates to IPE implementation. This interview will take approximately 60 minutes and will be recorded and transcribed using Zoom. The Zoom recordings are password protected and only you and I will have access to the transcript. Do you have any questions?

Main Interview Questions

1. Please tell me about your professional background.
2. How would you define IPE? (RQ #1 – IPE definition)
3. Please tell me about your previous experience with IPE. (RQ #2 – IPE attitudes)
4. How did you feel about your previous IPE experiences? (RQ #2 – IPE attitudes)
5. What do you see as benefits or drawbacks of IPE implementation? (RQ #2 – IPE attitudes)
6. How would you describe the organizational culture within your professional school? (RQ #3 – organizational culture)
    - What is the power distribution within your school? (PDI/MAS)
    - How are new ideas and processes incorporated within your school? (UAI/LTO)
    - How do faculty members relate to each other within your school? (PDI/IND/IVR)
7. How is IPE valued within your school? (RQ #4 – Culture and IPE)
8. What elements of the culture within your school support IPE implementation? (RQ #4 – Culture and IPE)

- Which are the most influential?

9. What elements of the culture within your school support IPE implementation? (RQ #4 – Culture and IPE)
    - Which are most influential?
10. Is there anything else you want to share about your perceptions related to IPE implementation?

Conclusion

Thank you for your time today and for sharing your perceptions about the university culture and IPE implementation. The next steps will be reading the Zoom transcripts, coding and analyzing the data, and preparing the results, which will take several weeks. Once this process is finalized, I will contact you and share a summary of my findings for you to review. You will also receive a modest gift in the form of a card for one of our campus vendors (Starbucks, Chick-fil-a, Luciano's, or campus bookstore). If you have questions about the study in the meantime, please contact me by e-mail or phone.

Appendix C: Member Check Interview Summaries and Responses

Introductory Script

I am conducting member checks for my research project. Please find a summary (listed as key points) of our discussion about your perceptions of culture and how it affects IPE implementation. For brevity, I have eliminated the introductory and conclusion portions. Please confirm that these points reflect your intent in our conversation. If I have misinterpreted something, please let me know so that I can correct it in my data.

Once again, thank you for sharing your perceptions. Your input was important to my project. I look forward to hearing from you.

Participant One

- Differences in interpretation/terminology are impeding IPE implementation.
- Accreditation requirements help drive IPE implementation but are inconsistent from program to program.
- IPE can help students in the health professions recognize each other more as humans/equals, especially if implemented early.
- Educational silos (physical and philosophical) inhibit IPE implementation.
- Faculty attitudes (considered a soft skill, not my job, extra activity, out of the comfort zone) inhibit IPE implementation.
- In your school, the power differential is not a significant barrier to change if an individual is committed to something.
- Implementing change for IPE will require incremental steps (insidious buy-in) and clear/explicit direction. It will take time.
- Changes should address the competencies (IPEC) as it is difficult to argue with them.
- The rigid curricula and lack of alignment among the health professions schools inhibits IPE. The programs need to give and take to find ways to flex and work together.
- Co-locating related programs could facilitate IPE.
- The university tenets can provide good support/guidance for IPE implementation.
- How key leadership positions (provost, School of Nursing and Health Professions dean) are filled can significantly affect IPE implementation.
- An IPE center with functional power to implement initiatives would be optimal but the present status suggests that the Deans will retain the power related to IPE implementation.

Participant Two

- IPE creates common learning experiences that can promote teamwork and increase recognition of different fields of practice.
- IPE allows programs to focus on commonalities among programs and share resources.
- Some programs have been excluded from IPE exercises in the past.
- Within your school, low faculty buy-in is a barrier to IPE implementation.
- The organizational culture of your professional school is becoming more inclusive.
- Changes in your professional school occur through faculty collaboration and in organizational meetings.
- In the past, it seemed that program initiatives were blocked by administration without full consideration.
- Programs within your professional school could focus on commonalities among them to help facilitate IPE.
- At the university level, professional program faculty seem to all be focusing on their own programs (in their silos).

Participant Three

- IPE is collaboration in the education of students from various professional backgrounds that prepares them to work together in practice.
- IPE can reduce stereotypes but also improves understanding of the scope of practice of the members of other professions.
- A challenge has been that students in the professional schools have been at different points in their educations (graduate/UG).
- Another challenge is that there are varied perceptions of what *collaboration* means.
- There needs to be an even playing field for all to share their opinions.
- Team teaching and committee work within your school helps reduce power differentials and increase collective spirit.
- Sometimes it is necessary to agree to disagree to accomplish things.
- Flexibility within professional nursing culture helps its members accept change.
- At the university level, long-standing perceptions about professional hierarchies result in some schools not valuing collaboration as much as others.
- Newer students accept that health professionals should talk to each other but do not recognize that that is not always the way things were done, which is a positive thing.

- Interprofessional practices could grow into other areas within the university, such research efforts and the enrollment process.

Participant Four

- IPE (WHO definition) needs to be interactive, not just co-existing through an activity. There is variation among faculty of what qualifies as IPE.
- The most important thing in the WHO definition of IPE is the focus on improving health.
- Students who participated in face to face IPE activities demonstrated higher (IPEC) team competency.
- Another important benefit of IPE is the potential capacity to provide joy in work.
- To date, IPE efforts at the university have been more grass roots level but it has not been widely adopted.
- Logistical challenges of varied location, different academic calendars, and tightening of clinical spaces create barriers to IPE.
- IPE tends to happen outside of the regular student/faculty schedule, which adds work for both groups and adds to resistance. Current champions are at risk of burnout.
- There has been a lack of recognition for the work associated with IPE efforts and baseline faculty workloads are already high.
- There is a lack of administrative understanding about the amount of work it takes to nurture our students.
- Historically, administrative support for IPE has been low but the current IPE initiative from the acting provost may increase support.
- Your school already includes multiple professions, which promotes a more accepting culture when it comes to IPE.
- The shared governance approach of the school reduces power differential within the school.
- At the university level, there is a power differential among the programs that contributes to competition for resources and territorial behavior. This has negatively affected past efforts at collaboration.
- New ideas within your school are addressed through faculty governance/meetings but those related to IPE may be pushed to “back burner” when there are other pressing issues.
- The organizational culture strongly supports the university mission and has high capacity to enhance IPE efforts (especially dedication to service/community/service-learning).
- Faculty development is a key step in implementing a sustainable IPE program.

Participant Five

- IPE is similar to interdisciplinary education (IDE) where students from different programs learn with/from/about/each other. IPE is generally used for the health professions programs.
- IPE/IDE can improve confidence/self-efficacy for students, can better prepare them for the workplace, and has capacity for networking that can lead to employment following graduation.
- IPE/IDE approach works well with experiential learning and supports the service-learning ethic of the university.
- IPE/IDE is not widely supported/promoted on campus. Rather, there are cliques of faculty who may work together on varied projects.
- IPE/IDE requires significant financial and time contribution (supplies, lesson planning, travel, etc.)
- IPE/IDE faculty efforts are not recognized, which contributes to lack of buy-in. Ex. - not included on the faculty evaluation so it is not something that they would spend time on.
- For new ideas, faculty either run with them or they die.
- At the school level, faculty contributions may go unrecognized until someone else at the university notices and says something.
- Time is a constraint for adding new initiatives.
- Providing training on IPE/IDE teaching methods and time to develop activities would increase faculty buy-in and enhance IPE/IDE implementation.
- For IPE/IDE to succeed, it needs to have administrative support/priority and faculty need to perceive that their work on it will be recognized.
- IPE benefits the students, benefits the community, and is in line with our mission.

Participant Six

- IPE involves placing students alongside each other in the classroom or tutorial setting where they collaborate and learn with, from, and about each other
- Sometimes the goals of IPE activities have been poorly defined – need clear objectives.
- Benefits of IPE activities for your students are that students have recognized their values as members of the healthcare team, have become more conversant with colleagues, and were able to learn more about the lingo or other professionals.
- A life-long benefit of IPE is the ability to develop professional networks that will be needed in practice.
- Barriers to IPE are scheduling and the need to include one's own professional curriculum into the time allotted.

- IPE is considered "extra," in that it happens in addition to the regular schedule and does not really count toward the grade. Learners want to know, "What's in it for me?"
- There is a lack of shared vision regarding what is expected of IPE, especially regarding what kind of collaboration is needed.
- We need to be cautious not to create "contrived" experiences…those that include all programs for the purpose of education but that would not realistically be encountered. Not every activity needs all services.
- Hierarchies (power differentials) vary by school and by person and the situation. Some faculty feel a bit over managed by administration but for other things, there is autonomy.
- Changes are perceived in how they affect the broader operation. The school is very integrated so a change could affect multiple courses. Changes that affect only one course are typically welcome.
- IPE is valued within your school as collaboration/teamwork is a long-standing professional behavior.
- Logistical challenges are the geography and the unique schedules of the university's health professions programs.
- The people with positive attitudes tend to show up and those who do not buy in don't show up.
- Lack of clear expectations contributes to lack of faculty buy-in. There needs to be better defined objectives and activities.
- IPE initiatives need to respect faculty members' time … needs to be perceived as worth it.

Participant Seven

- IPE is mostly done by the same group of people and does not have wide participation. This places them at risk for burnout. Need buy-in from more faculty.
- The dean of your school is supportive of IPE.
- Scheduling barriers have meant that IPE has happened on the weekend and is consequently perceived as "extra" but both faculty and students.
- IPE is essential to collaboration-ready graduates. Allows respectful communication/conflict resolution, breaks down stereotypes.
- Lack of funding and logistical issues inhibit IPE implementation.
- Faculty buy-in is influenced by lack of understanding about IPE. Training is essential.
- There is a check-the-box mentality about IPE among some faculty.

- At the school and university levels, lack of administrative support is a barrier. Deans provide "lip service" support to the idea but when it comes to supporting measures aimed at implementation, they back down and allow resistant faculty members to retain old practice.
    - Do not mandate changing schedule
    - Do not mandate participation.
    - Frustrating for those who are tasked with implementation – no authority.
- At the school level, faculty resistance is a barrier to implementation. Faculty feel that there is better use of their time.
- At the school level, the year two faculty have embraced IPE and the clinical coordinator is on board with scheduling to accommodate IPE activities.
- At the university level, lack of commitment to time and space requirements inhibits IPE implementation.
- Acting provost initiative is providing hope for those involved in IPE that it will be more supported in the future.
- But there is uncertainty about how future leaders will support IPE. If the person in the provost role should change or her previous role would not be filled, IPE support could decrease.
- For professional clinical faculty, IPE participation should be included in the evaluation process (ex. Promotion/tenure). IPE participation should also be portrayed as positive activity that is recognized by the dean but also reflects positively on the school.
- Using the service initiatives of the school could provide real life IPE experiences for our students.
- For initiatives to work, there needs to be full administrative support across schools and across levels from top to bottom/bottom to top.
- We don't need to try to reinvent the wheel. Rather, we need to use the literature to help succeed.
- Faculty training is key to initiating a sustainable IPE program.
- IPE is not institutionalized yet. We need to figure out how to do that while we have strong support from leadership.

Participant Eight

- IPE involves helping your students learn how to work collaboratively with other professions so that they recognize that medicine isn't a solo practice. Rather, it is a team effort of multiple different disciplines working together to provide excellent care.

- Interdisciplinary teams increase efficiency and improve communication resulting in better patient care. Allows the provider to capture nuances that might otherwise be missed.
- IPE can increase understanding about the scope of practice for professions other than one's own including patient care roles and when one would pick up and when one would drop off (care coordination).
- The physician is no longer perceived as "the captain of the ship" or the only person that matters. Each team member matters and things can break down anywhere along the line thereby compromising patient care.
- The team approach is shared in case studies with discussion of bringing in other members of the healthcare team but mostly has been done from a philosophical point of view, rather than a sit down with members of the different schools who could really get to know each other.
- The curriculum at your school is not owned by any individual, but the team of faculty.
- Logistics, student time, and varied schedules contribute to lack of IPE implementation.
- Any IPE implementation at your school would need to accommodate the students' self-directed learning time.
- Another barrier is faculty time and the newness of the program. They are still implementing the curriculum and are already spread thin.
- IPE could be supported through the existing community clinical education program by developing more formal guidelines.
- For IPE to succeed there needs to be a group of planners willing to really compromise to work together as a team.

Participant Responses to Member Checking

Participant 1: "I think you have it. Let me know if I can be of further help."

Participant 2: "Thank you for letting me participate. I think you have summed up our conversation well."

Participant 3: "I am in agreement with your comments related to my transcript. Good luck as you move forward on your project. Please let me know if you have other questions."

Participant 4: "Your notes are an excellent summary of what I shared with you. Best wishes as you continue to move forward with your data analysis and writing."

Participant 5: "After reviewing the discussion points below, you have absolutely summarized my statements correctly."

Participant 6: "All these points ring true to me. I think you've got it right."

Participant 7 (initial response): "Thank you for your patience with my delay in responding. Things have been CRAZY the last few weeks. Please see the email below with corrections/additions written in ( ) and highlighted."

My response: "Thanks for the feedback. I removed specific titles that could identify individuals so had been intentionally vague on the previous role. Your input was very helpful in the analysis of the problem and for making recommendations."

Second response: "No worries! I couldn't remember if I had been specific on her title. I hope your project is coming along well and that you can see a light at the end of the tunnel!"

Participant 8: "These points summarize (quite eloquently) our discussion of IPE."