Education Doctoral   Ralph C. Wilson, Jr. School of Education

8-2018

Leader Responses to Ambivalence During IPE Organizational Transformation: A Phenomenological Study

Pam Youngs-Maher
St. John Fisher College, pamyoungsm@gmail.com

[How has open access to Fisher Digital Publications benefited you?](#)

Follow this and additional works at: https://fisherpub.sjfc.edu/education_etd

Part of the Education Commons

Leader Responses to Ambivalence During IPE Organizational Transformation: A Phenomenological Study

Abstract

Executive leaders of higher education institutions that confer healthcare degrees are engaging in organizational transformations to meet the evolving needs of tomorrow's healthcare professionals. Organizational transformations can trigger ambivalence at individual and collective levels. Researchers purport that ambivalence, a push/pull reaction, may play a functional role during decision making in the face of change. The purpose of this research was to examine what practices leaders, who felt ambivalent during organizational transformation, used to successfully lead change. Interprofessional education (IPE), where academic leaders are transforming healthcare education from silos to collaborative systems, was used as the context for study because of the competing dynamics at the individual and collective levels in the change process that can trigger ambivalence. An interpretative phenomenological analysis design was used to learn how a purposive sample of nine leaders in nursing, medicine, and pharmacology colleges responded to ambivalence during change. The study examined the leaders' selection of strategies for leading change when ambivalence was present. The analysis revealed that leaders respond to ambivalence at the level where it occurred. Leaders contemplated the forces that triggered their ambivalence and were motivated by the compelling forces to pursue organizational change. Findings revealed five categories of change strategies: (a) leading roles, (b) building infrastructure, (c) empowering faculty, (d) spanning boundaries, and (e) joining maneuvers. The study recommends that leaders be mindful of the triggers of ambivalence to allow for more flexibility, engagement, and adaptation in leading change, and to attend to both the psychological and situational aspects of change.

Document Type
Dissertation

Degree Name
Doctor of Education (EdD)

Department
Executive Leadership

First Supervisor
Theresa Pulos

Second Supervisor
Anastasia Urtz

Subject Categories
Education

Leader Responses to Ambivalence During IPE Organizational Transformation:

A Phenomenological Study

By

Pam Youngs-Maher

Submitted in partial fulfillment

of the requirements for the degree

Ed.D. in Executive Leadership

Supervised by

Theresa Pulos, Ed.D.

Committee Member

Anastasia Urtz, J.D.

Ralph C. Wilson, Jr. School of Education

St. John Fisher College

August 2018

Dedication

This dissertation is dedicated to my family. To my husband, Larry, who has encouraged me to pursue my doctorate for years, and my daughter, Marisa, who has cheered me on all the way. Thank you both for your support and for the extra help with family chores! I'm also grateful to my parents, Barb and Stan Youngs, for instilling in me a love of learning and for understanding when family time was sacrificed for study time.

Thank you to the St. John Fisher College faculty in Syracuse. The design of the Executive Leadership Doctoral Program is indeed a disruptive innovation, and it is the faculty who bring it alive. Dr. Robinson was a leader in so many ways throughout the program, using humor, intuition, and stories to teach us. Dr. VanDerLinden introduced us to powerful concepts and took us to new places. Dr. Pulos will forever be linked with the importance of understanding and examining the lived experience, with mental models, and with observations at McDonalds! Dr. Evans helped us navigate through deep waters to examine our values, ourselves, and our responsibilities as leaders.

To my committee member Dr. Anastasia Urtz, I extend my gratitude for providing encouragement and sage advice when I could not see the forest *or* the trees. And to Dr. Theresa Pulos, my chair; you stretched my thinking, my scholarship, and my confidence. My deep appreciation for your belief in me and your help in leading me to new horizons.

Finally, thank you to my classmates. You provided laughter, insights, and inspiration. Every other weekend you reminded me that we are all in this together, and that relationships matter!

Biographical Sketch

Pam Youngs-Maher is currently the Director of eLearning at Upstate Medical University in Syracuse, New York. Ms. Youngs-Maher attended Cornell University from 1976 to 1980 and graduated with a Bachelor of Science degree in 1980. She attended North Carolina State University from 1988 to 1989 and graduated with a Master of Science degree in 1989. In 1997, she earned a Certificate of Advanced Study in Online Teaching from University of California Los Angeles. She came to St. John Fisher College in the summer of 2016 and began doctoral studies in the Ed.D. Program in Executive Leadership. Ms. Youngs-Maher pursued her research in leader responses to ambivalence during IPE organizational transformation under the direction of Dr. Theresa Pulos and Dr. Anastasia Urtz and received the Ed.D. degree in 2018.

Abstract

Executive leaders of higher education institutions that confer healthcare degrees are engaging in organizational transformations to meet the evolving needs of tomorrow's healthcare professionals. Organizational transformations can trigger ambivalence at individual and collective levels. Researchers purport that ambivalence, a push/pull reaction, may play a functional role during decision making in the face of change. The purpose of this research was to examine what practices leaders, who felt ambivalent during organizational transformation, used to successfully lead change. Interprofessional education (IPE), where academic leaders are transforming healthcare education from silos to collaborative systems, was used as the context for study because of the competing dynamics at the individual and collective levels in the change process that can trigger ambivalence. An interpretative phenomenological analysis design was used to learn how a purposive sample of nine leaders in nursing, medicine, and pharmacology colleges responded to ambivalence during change. The study examined the leaders' selection of strategies for leading change when ambivalence was present. The analysis revealed that leaders respond to ambivalence at the level where it occurred. Leaders contemplated the forces that triggered their ambivalence and were motivated by the compelling forces to pursue organizational change. Findings revealed five categories of change strategies: (a) leading roles, (b) building infrastructure, (c) empowering faculty, (d) spanning boundaries, and (e) joining maneuvers. The study recommends that leaders be mindful of

the triggers of ambivalence to allow for more flexibility, engagement, and adaptation in leading change, and to attend to both the psychological and situational aspects of change.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

The healthcare education system in the United States has been in place for over 100 years (Frenk et al., 2010). The Flexner Report (1910) established medical education as a two-phase model, with science courses followed by clinical courses. Other healthcare professions followed suit. For decades, healthcare professionals learned and operated in silos (Frenk et al., 2010). Cultural norms in healthcare are found in individuals, professions, and organizations. In hospitals, for example, physicians are seen as independent and as leaders, while nurses, traditionally female and the largest cohort of employees, are viewed as subordinates, yet they provide the bulk of patient care (Porter-O'Grady & Malloch, 2015). These cultural norms shape the mental models of healthcare providers and how they perceive the world, serving as "macro-structural barriers" (Ginsburg & Tregunno, 2005, p. 178) to collaboration across professions.

One method for achieving reforms in healthcare education is through interprofessional education (IPE), which changes healthcare education from discipline-specific silos to a collaborative process (Frenk et al., 2010; Gilbert, Yan, & Hoffman, 2010). While IPE has existed for decades (Barr, Koppel, Reeves, Hammick, & Freeth, 2005), it has become a potential solution for changing healthcare education in the United States since The Triple Aim (Berwick, Nolan, & Whittington, 2008) was published (Graybeal et al., 2010; Ho et al., 2008; Long et al., 2014). One goal of IPE is to cultivate a collaborative healthcare culture (Gilbert et al., 2010), which poses challenges for some healthcare professionals.

The challenges healthcare professionals face are at multiple levels, according to Ginsburg and Tregunno (2005). Mental models held by individuals were developed as part of their profession. Each profession has a discrete view of their own competencies and roles, impacting how professionals interact with each other, and within organizations. Changing healthcare to a collaborative model (Frenk et al., 2010) means change must extend from micro to macro levels (Ho et al., 2008), from individuals to professions to organizations (Ginsburg & Tregunno). Academic healthcare leaders are faced with finding ways to facilitate change that shifts long-held healthcare professional mental models and healthcare system hierarchies to overcome macro-structural barriers (Ginsburg & Tregunno) identified in healthcare organizations.

Ho et al. (2008) identified some of the micro to macro barriers that can interfere with IPE initiatives. Some faculty were unwilling to participate in IPE initiatives. In other cases, there were observed biases in faculty willingness to participate across professions, pointing toward power and gender biases. Some medicine and dental faculty were willing to participate in *intraprofessional* activities, but not willing to engage in IPE activities with nursing and allied health professions. These biases were held not only at the individual level, but in some cases at the academy level. Ho et al. found that leaders must work at individual, faculty, and academy levels to overcome barriers and establish IPE and "patient-centered, interprofessional, team-based care" (Ho et al., 2008, p. 934).

One catalyst for changing the status quo is a serious threat to organizational failure, such as adverse medical events (Ginsburg & Tregunno, 2005). Adverse medical events, situations resulting in harm or death to a patient, are a major concern. Goodman, Villareal, and Jones (2011) found that over 185,000 deaths occur annually in hospitals

and more than 6 million medical injuries occur across multiple locations; half of these deaths and injuries were considered preventable. Research points to errors caused by communication problems, poor record keeping, and little collaboration, all impacting patient outcomes (Titzer, Swenty, & Wilson, 2015).

Adverse medical events, including preventable deaths, were a catalyst for IPE in the United Kingdom (UK). Reeves et al. (2008) found the prevalence of IPE activity in the UK and in the literature increased in the 1970s. In 1987, the UK formed the Centre for Advancement of Interprofessional Education (CAIPE) (Horder, 2003). One cause of adverse medical events is communication: some professions use different words or acronyms for the same thing; in other cases the same word or acronym has very different meanings across different professions. In 1997, CAIPE first used the often-cited phrase that interprofessional education occurs when "students from two or more disciplines learn with, from and about each other" (Smith & Clouder, 2010, p. 2).

In their seminal study on IPE, Barr et al. (2005) spoke of the need to improve the quality of healthcare and to reform the workforce with IPE as a means to change. They conducted a synthesis review and examined 107 IPE studies dating back to 1966. Not all the studies were of high quality, but many reported results. Barr et al. defined three foci for IPE, finding evidence that IPE can (a) prepare individuals to be more collaborative, (b) cultivate collaboration, and (c) improve healthcare services. Of significance was the section on reforming education. Pointing to the socialization process of professional education that teaches students roles, values, norms, culture, and expertise, they stated it may also teach stereotypes of professions. "The root of the problem may lie more in

education than in practice . . . . If education is part of the problem, it must also be part of the solution" (Barr et al., 2005, p. 8).

In 2008, the U.S. healthcare system earned a mere 66 out of 100 points on the Commonwealth Fund Commission's scorecard as a High Performance Health System (Berwick et al., 2008). Berwick et al. called for better patient care, improved population health, and lower costs, declaring that health profession education must change. The World Health Organization released "Framework for Action" (Gilbert et al., 2010), outlining the need for IPE and collaboration on a systemic scale to achieve healthcare reform.

In 2010, the Lancet Commission published its report on transforming health professional education, deliberately releasing it 100 years after the 1910 Flexner Report (Frenk et al., 2010). Composed of 24 professional and academic leaders from around the world, the Commission amplified the call for healthcare education reform made by The Triple Aim (Berwick et al., 2008). The Commission said changes in postsecondary education in medicine, nursing, and public health are needed at the global level for healthcare professionals to meet 21st century challenges within and across countries. Complex infectious, environmental, and behavioral issues put both local and global populations at risk which the healthcare work force is not prepared to meet.

A qualitative study by Anderson and Thorpe (2014) demonstrated how IPE can develop the collaborate behaviors healthcare professionals need. Medicine, nursing, social work, pharmacy, and speech therapy students were engaged in an IPE course that included classroom lectures, observations of primary care providers serving patients, and actual home visits with patients. They worked in IPE teams of three to five students along

with primary care providers (PCP) to assess patient needs. Then they prepared and proposed their own care plans to the PCP. In one case with a diabetic patient, the medical student noted patient proficiency with blood testing and medicines and was satisfied. The nursing student noticed mobility issues and no fresh food in the house, and determined the patient was not cooking or eating properly. The social work student discussed home services. At the end of the term, PCPs, patients, faculty, and students were interviewed. PCPs reported better patient care insights and patient outcomes. Patients reported better health care plans and integration of services. Students demonstrated improved patient analysis skills, increased appreciation of others' professional expertise and the need for collaboration, and improved analytical skills in creating holistic care plans.

Problem Statement

Healthcare education institutions (HEIs) have taught health professionals in silos for more than 100 years, cultivating unique cultural norms, roles, and mental models within each profession (Frenk et al., 2010; Ginsburg & Tregunno, 2005). Michalec, Giordano, Arenson, Antony, and Rose (2013) studied perceptions of healthcare students and found they come into their respective programs with these norms and mental models. Nursing students were rated highly on team skills yet received low ratings on leadership skills. Leadership was rated as a low attribute for physical therapy and pharmacy students as well. Conversely, medical students were rated highly on leadership and academic ability, but they were rated lowest on interpersonal skills and the ability to be a team player. Likewise, Oandasan and Reeves (2005) found that medical students felt the need to "build a cloak of competence" (p. 40) and become authoritative, while nursing students believed they had a lower status than other health professions. These mental models

determined how students expected those in other healthcare professional programs to perceive them and behave toward them, which impacted their IPE experiences.

Calls resound to transform organizations that develop healthcare providers to better prepare professionals for collaboration and problem solving (Barr et al., 2005; Berwick et al., 2008; Brandt, Lutfiyya, King, & Chioreso, 2014; Frenk et al., 2010; Lawlis, Anson, & Greenfield, 2014). Rigorous studies provide evidence that IPE changes healthcare and is a catalyst for organizational transformation (Ginsburg & Tregunno, 2005; Reeves et al., 2016). Yet leaders are often challenged in their attempts to initiate and sustain change, including IPE (Brewer, 2016b; Dematteo & Reeves, 2011; Ho et al., 2008).

Organizational transformation is an intentional, systemic break from an organization's past to enable the organization to develop in new directions (Lee, Weiner, Harrison, & Belden, 2012). While both external and internal conditions can be catalysts for transformation, success relies on the capacity to lead the change to the desired outcome. A shared understanding of the new destination is crucial to success in transformation, yet when leaders are ambivalent about the change, Lee et al. (2012) noted that it can delay the process. Ambivalence occurs when one holds both "simultaneously positive and negative orientations toward an object" (Ashforth, Rogers, Pratt, & Pradies, 2014, p. 1454) within or across cognitive and emotional dimensions.

Cultural norms in healthcare are found in individuals, in professions, and in organizations. These norms impact how healthcare professionals perceive and interpret the world. HEIs have taught health professionals in silos for a century, cultivating professional norms in isolation from other disciplines (Frenk et al., 2010; Lawlis et al.,

2014; Olenick & Allen, 2013). IPE can be difficult for healthcare professionals who are constrained by their mental models (Ginsburg & Tregunno, 2005). HEI leaders who learned their professions in silos may be challenged in initiating change (Brewer, 2016b; Ho et al., 2008). Changing healthcare education means HEIs must change first, which is not always embraced by leaders and may trigger ambivalence. Examining how HEI leaders respond to ambivalence during IPE organizational change can provide insight into successful leadership practices used in times of organizational transformation.

Theoretical Rationale

Organizational change often focuses on champions of or resisters to change. An ambivalent response to change is often not recognized (Piderit, 2000). Studies on ambivalence have been conducted primarily through research in psychology, with individuals and through sociological lenses regarding the dynamics in relationships, roles, and norms. According to Ashforth et al. (2014), what has been missing is a theory or framework for analyzing ambivalence in organizational settings.

The ambivalence framework by Ashforth et al. (2014) provides a structure for the study of ambivalence in organizations. The framework shows that ambivalence is experienced where the trigger occurs, either individually or collectively. Different types of responses may occur when ambivalence is present. This major framework outlines two continuums that run parallel, one at the individual level and one at the collective level. The collective level can be groups such as units or departments on up to an entire organization or profession. As seen in Figure 1.1, the two continuums begin on the left side with triggers at the individual or collective level, then transition to ambivalence, then move to responses. Ashforth et al. theorized that triggers, ambivalence, and responses can

have cross-level effects in organizations. See Figure 1.1 for a visual depiction of the framework.

According to Ashforth et al. (2014), four types of triggers can lead to ambivalence. Type one occurs when roles, goals, and identities conflict with each other. Type two is organizational dualities, such as being a member of a profession and a member of an organization. Type three stems from multifaceted entities, such as relationships that have many facets, triggering ambivalence. The fourth type of trigger stems from temporal factors, ranging from an unusual event with one's boss on up to organizational change.
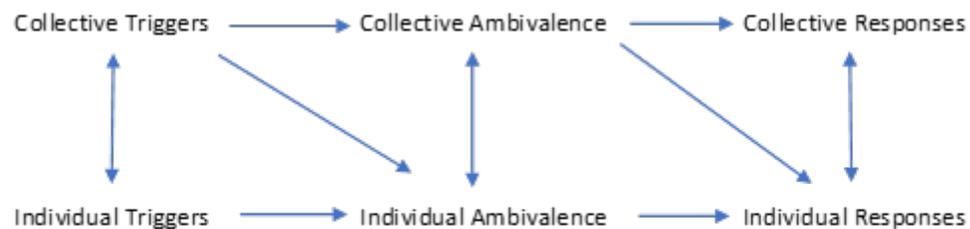
Figure 1.1. Organizational ambivalence across levels. Triggers can lead to ambivalence which leads to responses and can cross individual and/or collective levels. Adapted from "Ambivalence in Organizations: A Multilevel Approach," by B. Ashforth, K. Rogers, M. Pratt, and C. Pradies, 2014, *Organization Science, 25*, p. 1457. Copyright 2014 by Institute for Operations Research and the Management Sciences (INFORMS).

Statement of Purpose

The purpose of this study was to identify what practices leaders, who feel ambivalent during organizational transformation, used to successfully lead change. This knowledge can provide leaders with an understanding of processes that can be used individually as leaders, and collectively with colleagues and followers, when facing

change that triggers ambivalence. The study identified practices used by leaders to examine their own ambivalence once it was salient, the ambivalence that peers or followers experienced, and the change strategies they used to achieve transformation.

Ambivalence can be found in individuals; it can be found sociologically in norms, roles, and social structures; and collectively, within and among groups (Pradies & Pratt, 2010). Understanding how HEI leaders respond to ambivalence at one or more levels will inform the body of literature on ambivalence toward organizational change. Recent research on ambivalence in organizations finds it can play a functional or dysfunctional role (Ashforth et al., 2014; Rothman, Pratt, Rees, & Vogus, 2017). Learning leaders' perceptions of how they respond to ambivalence in their roles and organizations can provide insights into how ambivalence may be used functionally during organizational transformation.

Research Questions

The following research questions were examined:

1. Do HEI leaders experience ambivalence during organizational transformation?

2. How do HEI leaders respond to salient ambivalence, individually, collectively, or both?

3. Once ambivalence is salient, how do HEI leaders use it to examine change strategies?

Potential Significance of the Study

The past decade has brought tremendous change to healthcare as a system and as a sector in higher education. In 2008, Berwick et al. published The Triple Aim, calling

for reform in healthcare in the United States, including healthcare education. That year, the United States experienced a major recession. As part of an economic stimulus bill, the 2009 Health Information Technology for Economic and Clinical Health Act (HITECH) was signed (Cohen, 2016). HITECH provided *unprecedented financial incentives* for hospitals and primary care practices to use electronic health records (EHR), building a national technology infrastructure and bringing healthcare into the 21st century (Laiteerapong & Huang, 2015). HITECH initially provided incentives for participation, then imposed financial penalties if it was not adopted by 2015. In 2010, the Lancet Commission called for global changes in healthcare education (Frenk et al., 2010).

The HITECH Act was an imposed change. The Triple Aim and Lancet Commission called for but did not impose major systemic transformations in healthcare. IPE, one method for transformation, can be initiated by champions, leaders, and/or strategic initiatives, or it can be initiated by a groundswell of faculty who see it as the right thing to do (Abu-Rish et al., 2012; Brewer, Flavell, Trede, & Smith, 2016; Frenk et al., 2010). Change can trigger ambivalence, which can be positive and functional (Ashforth et al., 2014; Pradies & Pratt, 2010; Rothman et al., 2017). Given the many calls for changes in healthcare, this study will add to the literature leaders can use in times of organizational transformation when ambivalence is triggered by that transformation.

Definitions of Terms

Ambivalence – when one experiences "simultaneously positive and negative orientations toward an object" (Ashforth et al., 2014, p. 1454), within or across cognitive and emotional dimensions. It is not indifference or a polarized orientation, but it is a strong push/pull reaction (Ashforth et al.).

Levels – the ambivalent reaction that can occur in an individual, a group, or a collective such as an organization or profession (Ashforth et al., 2014; Pradies & Pratt, 2010; Rothman et al., 2017).

Response – an individual's effort to address ambivalence, which may engage cognitive, affective, and/or behavioral actions (Ashforth et al., 2014).

Salience – the awareness one has of his or her ambivalence. According to Ashforth et al. (2014), one could also be unconscious of one's ambivalence.

Triggers – factors that elicit the sense of push/pull (Ashforth et al., 2014).

Chapter Summary

Rapid changes in healthcare have led to imposed changes as well as opportunities for organizational transformations. Change can trigger ambivalence as leaders contemplate positive and negative aspects of an event (Ashforth et al., 2014). This includes the need to establish new ways of performing one's role, individually and collectively, in one's profession and one's organization (Frenk et al., 2010). Establishing IPE may create ambivalence among healthcare professionals as leaders transform the very organizations that employ those professionals. An interpretative phenomenological analysis design was used with a purposive sample of nine leaders of healthcare colleges to learn how leaders respond to ambivalence during organizational transformations, and whether they utilized the ambivalence in their change strategies.

Chapter 2 looks at the literature on IPE effectiveness, on leadership and organizational transformation, and on ambivalence. The research design, methodology, and analysis is discussed in Chapter 3. Chapter 4 presents a detailed analysis of the

results and findings. Chapter 5 discusses the findings, implications, and recommendations

for future research and practice.

Chapter 2: Review of the Literature

Introduction and Purpose

This chapter begins by examining the effectiveness of IPE as a catalyst for changing healthcare. That examination is followed by a focus on leadership in organizational transformations, including select models of change, leadership theories and tasks, and leader responses to change. Finally, an analysis of ambivalence looks at this construct, then at empirical studies of ambivalence in organizational change, and at leader responses to ambivalence. How leaders make sense of and respond to ambivalence during an organizational transformation can impact the success of the transformation.

Interprofessional Education

Utilized with preservice students and with post-licensure professionals, IPE is expected to facilitate understanding and respect among health professionals. Barr et al. (2005) found that IPE improves communication, collaboration, and the performance of teams in order to improve patient safety. In their seminal study on IPE, Barr et al. examined 107 IPE studies dating back to 1966. While not all 107 studies were deemed high quality, many reported positive results. The synthesis of these studies was a major contribution to research on IPE. An analysis of the 21 high-quality studies from the Barr et al. synthesis review will be discussed shortly.

A significant contribution of the Barr et al. (2005) synthesis review was the IPE modification of the Kirkpatrick (1959) measure of educational outcomes. Kirkpatrick's typology begins with (a) the learner's reaction to the educational experience; it then

moves up to (b) the knowledge and skills acquired, often called learning; then to (c)

behavior change, which results from new learning; and finally, to (d) the outcomes that

result from the behavior changes (Barr et al.). The revision of the Kirkpatrick model from

four to six levels for IPE is called the *JET Classification*, which is short for *IPE Joint*

Evaluation Team (Barr et al.). The JET typology begins with Level 1, reaction. Level 2a

measures modified attitudes/perceptions, and Level 2b measures new knowledge and

skills of the participants. Level 3 maps to behavior changes that occur as a result of the

IPE. Level 4a measures changes in organizational practices that move beyond individual

changes. Finally, Level 4b measures outcomes that are benefits to patients. While many

IPE studies have focused on Levels 1, 2a, and 2b, Barr et al. found that substantive

changes resulting from IPE occurred at the upper three levels (Levels 3, 4a, and 4b) in

individual behaviors, in organizational practices, and in benefits to patients respectively.

In 2007, Hammick, Freeth, Koppel, Reeve, and Barr published a synthesis review

on the 21 studies that earned 4 or 5 on a 5-point quality scale out of the original 107

studies in the Barr et al. (2005) review. Of the 21 studies identified, most measured

primarily reactions, knowledge, and skills (JET Levels 1, 2a, and 2b). Only one-third of

the studies reported changed behaviors, organizational practices, or patient outcomes

(JET Levels 3, 4a, and 4b).

Abu-Rish et al. (2012) found an increased impact in 83 IPE studies from 2005 to

2010. Most of the studies focused on Levels 1, 2a, and 2b. While only 37% studied

Levels 3 to 4b (changed behaviors, practices, and patient outcomes), 31 of 83 studies was

an increase compared to Hammick et al. (2007) findings where 33% of 21 studies

focused on Levels 3 to 4b. Further, Abu-Rish et al. noticed that in about 20% of the

studies, students, patients, and families helped create the IPE intervention(s) being researched. Abu-Rish et al. saw this as evidence that healthcare education was changing because IPE was no longer driven solely by faculty.

Reeves, Perrier, Goldman, Freeth, and Zwarenstein (2013) attempted a meta-analysis of IPE studies for the Cochran Database of Systematic Reviews, but they were unable to do so given the heterogeneity of the study designs, methods, and outcomes. A total of 15 quality studies from 2006 to 2011 were identified. Seven studies reported positive outcomes including changed behaviors in learners, teams, and patient outcomes. In the most recent synthesis review of IPE studies, Reeves et al. (2016) used the six JET levels to filter the studies. Of the 46 high-quality studies included, 15 reported positive behavioral changes, 11 reported positive changes in organizational practices, and nine studies reported positive outcomes in patient/client care.

The number of interventions, studies, and populations being introduced to IPE at the pre-licensure stage, and with post-licensure practicing healthcare professionals, continues to grow (Barr et al. 2005). Studies are increasingly rigorous and more focused on the upper levels of the Kirkpatrick (1959)/Barr (2005) JET outcome typology, and many are reporting positive results. Evidence of IPE effectiveness has grown since the 2005 Barr et al. study. The next focus of this chapter is on studies of how leaders, leadership teams, and organizations have initiated IPE as a catalyst for change, and how leaders have worked toward diffusing this innovation.

Leadership and Organizational Transformation

This section reviews selected models of organizational transformation, lessons from leaders who have successfully implemented IPE, and studies on the responses of

leaders during this change. Organizational transformation, defined by Lee et al. (2012), is an intentional, systemic change that breaks from the organization's past, across multiple levels and dimensions, creating the opportunity for leaders to chart a new course.

Models of change. Numerous theories and models for change exist. Some have been used more frequently than others with healthcare organizations, such as Rogers's (1962) diffusion of innovations (DOI). Interprofessional education, seen from within healthcare education and healthcare systems, is an innovation. The newness of an innovation, whether a product, practice, or process, is in the eye of the beholder. "It matters little whether the idea is 'objectively' new as measured by the lapse of time since its first use . . . if an idea seems new to the individual, it is an innovation" (Rogers, 2003, p. 12). IPE has been in the literature more than five decades, yet it is an innovation in healthcare where a *silo* approach to educating healthcare professionals is routine.

In Rogers's (1962) DOI theory, adoption patterns with innovations were studied, resulting in a bell-curve distribution of categories. With DOI revisions, Rogers (2003) determined that innovators, the first adopters, are the top 2.5% of the population. Early adopters are close behind and represent 13.5% of the population. Next, the early majority will adopt the innovation (34%), then the late majority (another 34%) will join in. Laggards, the final 16%, grudgingly come along when their preferred process or product is no longer an option. Understanding the categories of adoption helps one develop appropriate intervention strategies (Rogers, 2003).

Rogers's DOI theory has three facets. The first facet covers the attributes of an innovation. Next are the steps in the diffusion process. Finally, there are stages in the decision process regarding the innovation. The five attributes of the innovation begin

with (a) relative advantage: Is it better than the current state? Next, one perceives (b) the compatibility of the innovation, often compared with one's value system. Then, (c) the level of complexity is considered: How easy is it to understand? The (d) trialability of the innovation is a factor: How easy is it to test or sample? Finally, (e) observability makes it easier to adopt if it can be seen.

In the four-step diffusion process, the first attribute is the innovation itself. The idea, practice, or object is the innovation. Second, diffusion occurs via communication channels, from person-to-person, to mass media, to the Internet. The third attribute in the process is time, which has many permutations. The fourth attribute is the social system such as a hospital (electronic medical records) or a country (cell phone adoption).

Deciding whether to adopt the innovation occurs in five sequential stages (Rogers, 2003), beginning with (a) knowledge of the innovation, and progressing to (b) persuasion as individuals or units form a positive or negative attitude regarding the innovation. Step (c) is a decision to adopt or reject the idea, process, or object, followed closely by (d) implementation, when the innovation is actually put to the test and used. Finally, there is (e) confirmation, which results in affirming the decision, reducing dissonance, or discontinuance (with a replacement or rejection).

Greenhalgh, Robert, MacFarlane, Bate, and Kyriakidou (2004) conducted a systematic literature review on DOI, examining 495 innovation studies, largely in healthcare. They saw diffusion as *passive spreading*, while dissemination was a deliberate attempt to persuade *units* to adopt the innovation. Findings on adoption ranged from "let it happen" to "help it happen" to "make it happen" (p. 593). Greenhalgh et al. (2004) added several elements to the DOI theory, including system antecedents, system

readiness, and inner and outer contexts impacting the process. They found when organizations adopt an innovation, the assimilation process is not sequential but "messy" (p. 601). Greenhalgh et al. concluded when organizations successfully adopt innovations, success is based on leader and organizational readiness for change and whether the innovation came from inside or outside the system.

Leader and organizational readiness for change is a theme in Crow (2006), where the DOI was used as the framework to examine the role of the leader during transitions in healthcare. To establish change, even with evidence-based practices, Crow noted that the leader must understand the impact of the change on employees, keep plans simple, and never overlook the emotions that unfold. Whether one anticipates a sequential process or a messy process, one must recognize that change involves values, choices, and emotions. If anxiety and fear enter the decision process, inertia or indignation can result, which impedes progress and can erode trust between staff and administration. Crow advocated that all employees involved in change must understand the evidence and vision of the future for the innovation and the change to succeed.

Utilizing strategies from change models including the DOI in designing an annual IPE conference, Brewer (2016a) involved faculty, health practitioners, and students in a collaborative process. Key leaders spoke to the relative advantages of IPE and how it serves patients better, international IPE experts shared updates, and a local panel shared IPE impacts, demonstrating the DOI stages. Participant evaluations from students, faculty, and health practitioners expressed IPE endorsement (Brewer, 2016a).

In another study, Brewer (2016b) examined the capability framework model for IPE change. This model creates a shared vision, a common language, and a mental

model. Faculty from a large IPE program participated in the study. Resulting themes were: *What is IPE/IPP(interprofessional practice)*, including visual representation, and *Why teach IPE/IPP?*, with subthemes of *vision* and *purpose*. Sense making helped participants create the framework they needed for implementation with other faculty, with students, and with HEI leaders.

Using Bolman and Deal's (2013) reframing organizations and the four frames, human resources, political, structural, and symbolic, Farnsworth et al. (2015) attempted to predict IPE progress and success. One dean and one faculty from 115 schools were invited to participate in the survey. Deans and faculty, alike, perceived the political dimension was more advanced than the other frames, and the structural dimension was lowest in development. Farnsworth et al. suggested leaders use the four frames to deliberately *frame* IPE (sense giving) to further IPE. Gioia and Chittipeddi (1991) found the primary role of a leader during strategic change was sense making (scanning the environment and revisioning the organization) and sense giving (conveying a new vision and framework to move others to action).

Kotter's (1995) 8-step change model was originally published in an article on why transformation efforts fail. The following year, Kotter (1996) published his book *Leading Change* that featured a linear, 8-step change model, now considered the seminal work in organizational change (Kotter, 2018). Kotter (1996) believed that to create and institutionalize change, one needed strong leaders who were able to create a sense of urgency, then garner the energies and talents of a group of people who had the power to make the change happen and sustain it. It was Kotter's (1995) contention that more than 50% of failed attempts at change occurred when there was not a clear sense of urgency.

Still more failures occurred when the coalition did not create and broadcast a clear vision. His eight steps from 1995 are listed below. The wording has been modified over the years since the steps were first published:

1. Establishing a sense of urgency

2. Forming a powerful guiding coalition

3. Creating a vision

4. Communicating the vision

5. Empowering others to act on the vision

6. Planning for and creating short-term wins

7. Consolidating improvements and producing still more change

8. Institutionalizing new approaches

Using Kotter's (1996) 8-step model, Campbell (2008) helped healthcare managers prepare for the adoption of a new technology, electronic health records (EHR). Campbell used the three phases in Kotter's (1996) model to prepare managers, physicians, and technicians, given the complexity of the technology and the need to remain competitive in the healthcare field. The first phase is creating a climate for change (Steps 1-3); the second phase is engaging the organization (Steps 4-6); and the third phase is implementing and sustaining the change (Steps 7 and 8).

Campbell (2008) used not only the 8-step model to help employees make the change, he also used the transitions model by Bridges (2003). While Kotter's (1996) eight steps do include affective elements in the model, they are focused largely on situational components, in other words, the organization. Campbell chose to include the work of Bridges because of the focus on the psychological aspects of transitions for

individuals. Ultimately, change for individuals often means letting go of one identity and transitioning to a new identity. The three stages in Bridges's (2003) model are *endings*, *the neutral zone*, and *beginnings*.

Campbell (2008) was able to juxtapose the two models in the adoption of EHR. An example of how the two models complemented each other occurred when employing Kotter's (1996) Step 3, communicating the vision on efficiency and improved patient safety, with EHR with physicians. Simultaneously, the Bridges model helped the training teams think about how physicians felt, and what they were losing with the changes, such as loss of eye contact with patients while entering EHR data. The key was listening, acknowledging the loss, and helping individuals work through their feelings to the next stage, the *neutral zone*. This involved helping individuals recognize a journey starts with a step. Breaking the *journey* (change) down into manageable steps helped people through uncertainty. This parallels the short-term wins. The third and final phase in Bridges's model, *beginnings*, maps to Kotter's (1996) Steps 7 and 8, *producing still more change*, and *institutionalizing new approaches*. Campbell concluded that all individuals impacted by change need to be part of the transition team. Both the situational and psychological arenas must be addressed.

Williams (2014) used Kotter's (1996) 8-step model to evaluate a disease management program (DMP) with Kaiser Permanente in California. Her qualitative study examined effective steps in change and strategies that were ineffective or contradicted Kotter's (1996) strategies. Participants were physicians and Healthy Bones Care Managers. Williams identified nine effective themes and 10 best practices, all of which mapped to Kotter's (1996) 8-step model. She found six ineffective themes and six

ineffective strategies, all of which mapped to Kotter's (1995) list of common errors. She

concluded that Kotter's (1996) 8-step change model was effective for healthcare reforms

at local, corporate, and national levels.

Burden (2016) used Kotter's (1996) 8-step model to investigate and change

surgery practices in England when surgical site infections increased fourfold over a 2-

year period with breast surgery patients. Receiving a notice of the fourfold increase from

Public Health England (PHE) created a sense of urgency for surgery units to form a team

to analyze the problem and create a vision. This vision included initiatives and a plan for

change, all of which were communicated to surgical units. Communication included why

the change was important, and how people were expected to engage in communication as

teams and in data collection in order to involve them in the change.

Burden (2016) factored in the situational and psychological change elements as

introduced by Campbell (2008). She used Kotter's (1996) steps in the change model, and

also anticipated the need to work through anxieties and stubbornness. Methods were

found to empower employees in identifying creative solutions, succeeding with short-

term wins, and in monitoring data that showed sustained change. Burden reported that

while progress was made, the hardest part of the change was Step 8, *making the new*

procedures stick. A reflective cycle was introduced to help employees examine the data,

the procedures, and the concerns, and to commit to the new processes that ensured patient

safety.

Kotter (2018) recently released an updated version of his change model. It is

called the *8 Steps to Accelerate Change Ebook*. The process has eight accelerators and is

in response to the increasingly rapid pace of change in today's work environment. He

also included change principles that are designed to engage many of the members in the organization in change efforts. The language of the eight steps has changed to reflect the sense of acceleration. Kotter (2018) stated that leaders today must frame change as an opportunity to inspire people by appealing to their hearts and heads. This focus on inspiring people is designed to enlist the many who will become the army needed to produce meaningful change. Previously depicted in a linear model, Kotter (2018) now displays a circle with eight accelerators, indicating that they can occur simultaneously.

Figure 2.1. Kotter's Eight Accelerators for Leading Change. Source: "8 Steps to Accelerate Change Ebook" by J. P. Kotter, 2018, p. 9. Copyright 2018, Kotterinc.com.

A long-standing change model is Lewin's field theory (1951). This postulates that behavior is influenced by interactions with the environment. Both individual and group behavior results from the forces in the field, the field meaning the environment. Over the years, this model came to be known as *force field analysis* (Burnes, 2004). Three elements are essential to understanding force field analysis and the relationship to change. First, any changes in the environment result in changes in behavior. Second, changes and behaviors fluctuate and are not static; they are in a continuous state of

23

adaptation. Third, Lewin (1951) believed one could identify the forces impacting behavior and determine what forces needed to be strengthened, or minimized, to bring about change. Hence, force field analysis is a change model that can be used with individuals and groups to identify and manipulate forces to bring about select change.

Leading change. Ho et al. (2008) found that not all IPE efforts are based on models. An IPE transformation in education is, at a minimum, situated in transitioning curricula and operations from separate disciplines, departments, and colleges to integrated curricula, activities, and clinical experiences across disciplines. Ho et al. interviewed leaders of select Canadian HEIs identified as national IPE model programs. There were three key findings. First, successful programs started and continued due to IPE champions. According to Ho et al., champions may be found throughout the organization. Some were senior level leaders who made IPE visible, allocated resources, and influenced the organizational structure. Some were faculty who voluntarily worked in collaborative ways across job and college boundaries, modeling teamwork and initiating curriculum changes with support of academic leaders. Second, organizational structures conducive to coordinating learning, scheduling, and collaborating among leaders were developed. This included campus wide activities that involved students across disciplines, adjusting college academic calendars, and finding common themes in the curriculum in order to create team taught courses across disciplines. Third, funding was made available for both employee resources and infrastructure changes (Ho et al., 2008).

In a similar study with both Canadian and U.S. HEI leaders, Graybeal, Long, Scalise-Smith, and Zeibig (2010) echoed the Ho et al. (2008) findings. Graybeal et al. (2010) also had three key findings. First, success depends on support from multiple

constituents. College deans in particular must be fully invested, must find funding (often

to reduce teaching loads of faculty champions), and must ensure accountability of the IPE

efforts. Further, faculty involvement was crucial; some served as IPE champions with

planning and advocacy while others worked on the IPE curriculum. Second, a culture

change occurred over time that established IPE. Third, funds were made available.

Canada invested government funds; the United States did not. Both studies found similar

challenges including funding needs, the demand for scholarly research, and the need to

move from championing to establishing IPE (Graybeal et al.).

In their scoping review on leadership in IPE education and practice, Brewer et al.

(2016) found that transformation was underway in healthcare leadership. Many of the

114 articles provided examples of collaborative, relational, shared, adaptive, distributed,

and transformational leadership emerging in healthcare in general, and with IPE

specifically. Some studies were descriptive, while others spoke of models and theories,

including network theory, quantum leadership theory, and complex adaptive systems

theory (Brewer et al., 2016).

Brewer (2016a, 2016b), Brewer et al. (2016), Ho et al. (2008), and Graybeal et al.

(2010) looked at IPE leadership through the eyes of leaders. Olenick and Allen (2013)

examined IPE leadership from the faculty perspective. In a rigorous study with 439

faculty members from allied healthcare colleges, Olenick and Allen used two attitude

scales and two items to determine faculty perceptions of subjective norms (SN). The

items were: "*My faculty colleagues think I should or should not engage in IPE*" and "*My

school's administrators think I should or should not engage in IPE*." The perceived

influence of the school administrator (admin SN) explained over 26% of the variance in

one's intent to engage in IPE, pointing to the importance of the leader's influence on faculty participation in IPE (Olenick & Allen, 2013).

This section reviewed models for organizational transformation with IPE, then looked at leadership roles and theories in leading change, as well as challenges that leaders may experience in implementing IPE. The next section examines ambivalence.

Ambivalence

This portion of the literature review includes synthesis reviews and empirical studies on ambivalence relating to organizational change and to leaders. The construct of ambivalence is outlined, followed by studies on ambivalence where change was imposed. Studies demonstrating that ambivalence can be utilized by leaders in a functional process to influence organizational transformation conclude the chapter.

The construct of ambivalence. Ambivalence comes from the Latin *ambi*, meaning both, and *valere*, to be strong (Ashforth et al., 2014). It is "simultaneously positive and negative orientations toward an object" (p. 1453). A positive focus attracts; a negative focus repels. Individuals describe ambivalence as feeling torn, such as having conflicting thoughts; or one might say he thinks *X* about something but feels *Y* about the same thing, resulting in a clash between cognitions and emotions (Ashforth et al.).

In a frequently cited paper, Piderit (2000) argued that research and literature on organizational change is oversimplified. The author opined that employee responses are not simply for or against change. Piderit noted employees who express resistance may have positive intentions, yet resistance is often seen as negative; less than compliance is seen as resistance to change. Research shows that employees may resist change for ethical reasons, or they may perceive change as harmful personally or professionally.

26

Resistance has been defined in behavioral terms (inaction, defiance), cognitive terms (reluctant, unready), and emotional terms (frustrated, anxious). Piderit used a multidimensional construct labeled ambivalence that included cognitive, emotional, and conative dimensions. This is known as the *tripartite view of attitudes*.

The cognitive dimension includes the beliefs held by an individual regarding the trigger event or object. The emotional element maps to the feelings one has in response to the object or event. The conative facet of the tripartite view of attitudes refers to an individual's attitude that reflects past behavior or one's intention to act in the future. Each dimension is a continuum, ranging from positive to negative. One could have a positive cognitive response while experiencing a negative emotion. Piderit (2000) found that research supports the cognitive and emotional dimensions, while results with the conative dimension were mixed, or it was not included in the studies. When studied, Piderit found that conative attitudes often did not draw on past behavior, rather they pointed to future intentions as in a plan for action.

Pradies and Pratt (2010) determined that ambivalence occurs at three levels. Psychological ambivalence occurs at the individual level when one experiences conflicting thoughts, emotions, or both. Sociological ambivalence occurs when roles, norms, and/or culture conflict, such as when incentives are given to individuals yet the work is done by teams. Group ambivalence resides in the interactions between members; there are two types (Pradies & Pratt 2010). Holographic group ambivalence occurs when everyone in the group experiences the same ambivalence (e.g., all members who were transferred to a new site felt the same sadness and excitement). Ideographic group

ambivalence occurs when there is ambivalence across subgroups, for example, when one group supports X and one opposes X.

In their analysis of the literature, Ashforth et al. (2014) described ambivalence more simply than Pradies and Pratt (2010), framing it from the individual to the collective level. Once ambivalence appears, it can spread to another level, according to Ashforth et al. From individuals, it can move to groups through a bottom-up or contagion effect. Collectively, ambivalence can have a cascade effect or be used deliberately to stimulate or challenge change. Ashforth et al. built a framework to examine research and to inform future research in the analysis of triggers and responses to ambivalence at both the individual and collective levels and to explore whether resolution occurs where it began (individually or collectively).

Piderit (2000) stated that research should help organizations understand ambivalence so leaders can anticipate responses and find processes for working with ambivalence. She said working with ambivalence is an important element in managing change. Leaders can use ambivalence when dialogue invites an examination of the causes of ambivalence and options for organizational change (Piderit).

Ambivalence and imposed change. Piderit's (2000) proposal to help leaders in organizations understand how to identify, describe, and determine processes for working through ambivalence is useful with imposed change. Larson and Tompkins (2005) examined a firm as it changed to a flatter structure. Former managers found their roles changing, and they struggled to make sense of their new identity. They "undermined their own change efforts" (p. 11) by broadcasting old values and ambivalence and supporting employee resistance to the change. Similarly, Randall and Procter (2008) studied senior

managers where imposed change restructured the organization. All managers were in the same role; some had worked over 30 years with the organization, some had 10-15 years, and some had less than 5 years with the organization. Randall and Procter analyzed the data by Piderit's (2000) tripartite dimensions (cognition, emotion, and intention), and the long view, short view, and new view of experience. The authors noted imposed change and length of time with an organization can be antecedents to ambivalence (Piderit).

Armenakis, Harris, Cole, Fillmer, and Self (2007) created a tool called the *change sentiment framework* for use with managers when a new unit's performance was evaluated by executive leaders. Manager reactions to the organizational transformation did not express resistance but ambivalence toward the strategies. The framework, informed by Piderit's (2000) work, asked why participants believed the change was or was not working. The responses informed executive leaders about the effectiveness of the transformation strategies for continuous improvement efforts.

Oreg and Sverdlik (2011) also studied imposed change with three cases: a merger, a relocation, and restructuring. They anticipated imposed change would elicit stronger responses. The studies looked at two key factors: how employees felt about change, and how they felt about the change agent. In all three studies, the individuals' orientation toward change correlated to the orientation toward the change agent. Oreg and Sverdlik concluded that orientation toward change and the change agent can conflict with each other, leading to ambivalence.

Studies that find resistance to or support for change but that dismiss midrange scores as indifferent may miss ambivalence. Oreg and Sverdlik (2011) found that employees who scored in the midrange and expressed ambivalent feelings were aware of

the many implications of the change. Oreg and Sverdlik suggested that if managers

involve employees, they can potentially mitigate some of the negative elements that

imposed change can bring. And, the researchers found that ambivalent employees are

more often open to persuasion than their peers who are resistant to change (Oreg &

Sverdlik, 2011).

Ambivalence as a process tool. Leaders involved in organizational

transformation make decisions, and organizational decision making has historically been

based on the premise that leaders see issues or events as positive or negative (Plambeck

& Weber, 2009). Recent research suggests leaders may perceive some events or issues

with ambivalence (Ashforth et al., 2014; Pradies & Pratt, 2010; Rothman et al., 2017),

which can shape the decision-making process and the results.

Extrapolating from research on individual ambivalence, Plambeck and Weber

(2009) studied executives and their decisions by surveying German CEOs in 2004 as the

European Union was enlarged. They found ambivalence triggers emotional arousal,

disrupts routine processes, and leads to the pursuit of creative options. This can "prime

other decision makers . . . to use broad cognitive approaches" (Plambeck & Weber 2009,

p. 996). The more ambivalently the CEO evaluated the issue, the more likely the CEO

was to take risks with novel actions. CEOs with a sense of control over the issue were

less likely to act. Those who viewed the issue positively pursued "cold cognition"

(p. 1006) rather than creativity.

The study of German CEOs by Plambeck and Weber (2009) examined individual

ambivalence and the impact on decision making. Pradies and Pratt (2010) conducted their

research on ambivalence with groups when decisions must be made, and they identified

three responses to ambivalence that are instructive for leaders. The first is response

rigidity, where polar positions are resolved by the group taking a rigid stance, using

groupthink. The second is *rigid response fluctuation*, where the group considers only two

options, flips back and forth between them, but will not consider other choices. Third is

response flexibility, the most functional of the three responses. Group members are

tolerant of various options and will flex as needed. Pradies and Pratt posited that leaders

who feel ambivalent themselves, or who choose to use ambivalence, can encourage the

group to look for different options and to try out various approaches and strategies.

Pradies and Pratt (2010) found that leaders who understand the three types of

group ambivalence are able to see whether there is uniform ambivalence within the group

(holographic) or if there are subgroups creating ambivalence within the group

(ideographic); this helps one manage the ambivalence. To manage rigidity, Pradies and

Pratt suggested that a leader can encourage ambivalence to help members examine more

options and see other paths to resolving the ambivalence. Where there is fluctuation, a

leader might capitalize on his or her own ambivalence and encourage the group to

identify more options so that there is not an either/or decision to be made. When a group

experiences response flexibility, the leader can cultivate ambivalence to capitalize on the

wisdom in the group (Pradies and Pratt).

Guarana and Hernandez (2016) conducted experiments to determine the impact

ambivalence has on decision making. Their results suggest that when one can identify the

cause of the ambivalence (identified ambivalence vs. felt ambivalence), one is more

aware of the situation. Participants were more mindful in decision making, attending to

ideas and data that provided contrasting arguments or perspectives (Guarana &

Hernandez). Their research suggests that leaders with teams or organizations facing a decision should capitalize on identified ambivalence and investigate both the pros and cons of various options as a functional benefit of ambivalence (Guarana & Hernandez).

In a synthesis review on ambivalence research, Rothman et al. (2017) found ambivalence can facilitate functional and positive outcomes. Rothman et al. examined flexibility and engagement dimensions during ambivalent responses, and found that *cognitive flexibility* means one is open to a range of options, attends to more perspectives, and unlearns prior knowledge; *flexibility* is largely triggered by emotional ambivalence rather than attitudinal or cognitive ambivalence. Rothman et al. found that relative to engagement, one is positively or negatively engaged in relationships with others. Several studies found when individuals expressed ambivalence in what was perceived as negative and aggressive behavior, others disengaged. Conversely, when leaders expressed emotional ambivalence, followers became empowered, proactive, and engaged in change. The researchers speculated that when leaders express emotional ambivalence through positive, engaging behaviors, it can trigger openness and flexibility among followers.

Benefits for leaders and groups found in empirical studies examined by Rothman et al. (2017) included increased creativity from emotional ambivalence, and ambivalence was a bridge between conflict and adaptation, where one is more open cognitively to new processes, and more likely to develop new behaviors in adapting to new situations. Other benefits include cognitive flexibility, mindfulness, and cognitive wisdom.

Chapter Summary

IPE has demonstrated through increasingly rigorous research that it is effective in improving the quality of healthcare through changes in individual behavior, education,

organizational practices, and patient benefits (Abu-Rish et al., 2012; Barr et al., 2005; Brandt et al., 2014; Hammick et al., 2007; Reeves et al., 2013; Reeves et al., 2016). This evidence has led to the pursuit of IPE as one catalyst for change in healthcare. IPE has been integrated into some HEIs to facilitate the development of the expertise, collaborative skills, problem-solving abilities, and professional norms of the healthcare professionals of tomorrow (Brewer, 2016a, 2016b; Brewer et al., 2016; Farnsworth et al., 2013; Frenk et al., 2010; Graybeal et al., 2010; Ho et al., 2008).

Several leaders provided testimonials to the success they had in organizational transformations and the changes that were involved in pursuing IPE (Graybeal et al., 2010; Ho et al., 2008). The literature on IPE leadership is not expansive, yet it does point to a growing consensus that shared leadership is a good fit with IPE (Brewer et al., 2016). IPE is often a catalyst for organizational transformation where the organization makes an intentional break from the past in order to chart a new path (Lee et al., 2012).

When engaged in an organizational transformation, leaders may experience ambivalence (Piderit, 2000). Ambivalence can occur at an individual, a group, or at a collective level such as an organization (Ashforth et al., 2014; Pradies & Pratt, 2010; Rothman et al., 2017). Studies by Ashforth et al. (2014), Guarana and Hernandez (2016), Pradies and Pratt (2010), and Rothman et al. (2017) demonstrate how leaders can better understand and utilize ambivalence, gaining benefits such as cognitive flexibility, openness to new ideas, and moving from conflict to adaptation.

Research on ambivalence is scattered and typically not focused on organizations (Ashforth et al., 2014). No studies were found on leader responses to ambivalence in higher education. This research used an interpretative phenomenological analysis (IPA)

(Smith, Flowers, & Larkin, 2012) method to study the lived experiences of leaders in healthcare education. A small purposive sample of deans of medicine, nursing, and pharmacology colleges were interviewed. The research was designed to learn how these leaders process ambivalence during organizational transformation with the goal of establishing IPE and a collaborative method of educating healthcare professionals after decades of conducting education and practice in silos (Frenk et al., 2010). The research design, IPA methodology, data collection and data analysis are discussed in Chapter 3.

Chapter 3: Research Design Methodology

Introduction

IPE is an approach to healthcare professional education that is built on a collaborative framework. Rigorous research has demonstrated that IPE can change healthcare practices and outcomes (Reeves et al., 2016). Transforming healthcare education to an IPE model can trigger ambivalence when professional norms, hierarchies, roles, and mental models are challenged (Ginsburg & Tregunno, 2005; Ho et al., 2008). HEI leaders who learned their healthcare professions in silos are now tasked with leading IPE organizational transformation (Frenk et al., 2010). Based on attitude research, Piderit (2000) posited that ambivalence is prevalent during change, and most employees, including managers, respond to a proposed change with some ambivalence.

Examining how HEI leaders respond to ambivalence while establishing IPE can identify leadership practices that have been used successfully during organizational transformation. Research on organizational change often focuses on champions of, or resisters to change. However, ambivalence is a response to change that is not often recognized (Piderit, 2000). Ambivalence research in organizations is limited (Ashforth et al., 2014), yet it indicates ambivalence can lead to more creativity, consideration of more alternatives, better decision making, and stronger commitment to an organization. The research identifies what leaders perceive as important in their response to, and processing of, ambivalence during change. IPE was the catalyst for the transformation experience to be studied.

The following research questions were examined in this research effort:

1. Do HEI leaders experience ambivalence during organizational
    transformation?

2. How do HEI leaders respond to salient ambivalence; individually, collectively
    or both?

3. Once ambivalence is salient, how do HEI leaders use it to examine change
    strategies?

An interpretative phenomenological analysis (IPA) method was used to explore
the experiences of HEI leaders where transformation was in process. The transformation
in this study was situated in transitioning curricula and operations from separate
disciplines, separate departments, and separate colleges into integrated curricula,
activities, and clinical experiences across disciplines and colleges through IPE. In this
IPA study, the researcher interviewed participants who had experienced the phenomena
and invited them to reflect on their experiences and their meaning-making. The
researcher interpreted the data as a cyclical process, a "dialogue between what we bring
to the text, and what the text brings to us" (Smith et al., 2012, p. 26).

The HEI leaders' experiences during IPE organizational transformation were
explored, including whether ambivalence occurred and if it was salient. In their
examination of the literature, Ashforth et al. (2014) found ambivalence results in
"simultaneously positive and negative orientations toward an object" (p. 1454).

In her research on ambivalence, Piderit (1999) used a multidimensional view of
attitudes, namely cognitive, affective, and conative (based on past behavior or intent to
act in the future) dimensions, known as the tripartite view. Research consistently

identifies ambivalence when both positive and negative responses occur within or across

cognitive and emotional dimensions. Piderit (1999) acknowledged that evidence on the

conative dimension in ambivalence was not consistent. Ambivalence is described as

experiencing a push/pull reaction within or across cognitive and emotional dimensions

(Ashforth et al., 2014). With an extremely positive or an extremely negative orientation,

one is polarized. If the issue is not important, or the response is weak, one is indifferent.

The individual's effort to address the ambivalence is the response, which may engage

cognitive, affective, or intentional actions toward the ambivalence (Ashforth et al.).

Salience is the person's awareness of the opposing orientations; one may not be aware of

one's own ambivalence. This research studied leaders who experienced salient

ambivalence during change.

Ashforth et al. (2014) found studies demonstrating that ambivalence occurs at the

individual level and at the collective level. Once ambivalence appears, it can spread to

another level. The researchers theorized that responses and resolution tend to occur at the

level where ambivalence begins.

The IPA method was chosen to elicit each participant's experience with

organizational transformation and ambivalence, given that IPA is concerned not only

with the experience but also with the cognitive-affective responses to the experience

(Smith et al., 2012). Few studies have investigated ambivalence relating to organizational

change (Ashforth et al., 2014). This study explored leaders' ambivalence, whether it was

used to examine change strategies, and how the participants resolved the ambivalence,

individually, collectively, or both. The IPA method provided a means for collecting data

that was rich in the intrapersonal and interpersonal aspects of ambivalence and allowed

the researcher the opportunity to interpret the findings based on a dialogue with leaders and with the text.

Research Context

The IPA method was used to explore the experiences of college leaders where two or more healthcare schools or colleges on the same campus were implementing IPE. Deans at institutions in upstate New York were sought for proximity to the researcher, and to provide the opportunity for in-person interviews.

In an IPE study by Long, Schwarz, Conner-Kerr, Cada, and Hogan (2014), an analysis of 21 accreditation documents was used. The analysis concluded that while accrediting bodies included some statements that hold academic programs accountable for IPE, there was not a widespread mandate for IPE. Therefore, Long et al. (2014) contended that the "more progressive academic institutions will embrace IPE" (p. e38), where college leaders navigate institutional priorities and barriers to implement IPE. Even academic administrators who are considered IPE leaders reported they needed to be creative in solving the complexities of IPE implementation (Graybeal et al., 2010), and they "all struggled with the fact that this [the importance of IPE] is not a universal understanding" (p. 236), it is not yet the norm, and implementation remains challenging.

Participants were sought from HEIs with two or more health-profession colleges on the same campus. This provided the setting for IPE initiatives where courses and activities to engage students across different health professions would occur not only across disciplines, but across colleges with their own cultures and structures (Blue, Chesluk, Conforti, & Holmboe, 2015; Graybeal et al., 2010; Long et al., 2014).

Research Participants

The study population consisted of academic leaders who were deans or associate deans in schools or colleges that award degrees in the health professions of medicine, nursing, and pharmacy. The role of dean was selected because of the responsibilities they have for meeting accreditation requirements, promoting institutional priorities, and for providing leadership for program and curricula initiatives such as IPE (Blue et al., 2015; Graybeal et al., 2010; Long et al., 2014). Olenick and Allen (2013) studied faculty intentions regarding engagement in IPE. They found a combined positive attitude and perceived administrator pressure to participate in IPE was the best predictor of faculty intent. This was an additional reason to examine the positionality of deans.

IPA calls for a small, purposive sample of participants (Smith et al., 2012). Deans from healthcare colleges and schools in upstate New York were identified through professional networks and through snowball sampling. Deans located in Central and Western New York were chosen owing to the proximity of the researcher to allow for in-person interviews. This study sought participants from multiple disciplines to glean various perspectives on changes in healthcare education and whether the leaders processed the ambivalence individually or with colleagues.

In their study of faculty intent to engage in IPE, Olenick and Allen (2013) used a stratified, random, proportional sampling strategy. They identified 1,727 health programs across the United States in seven disciplines, including nursing and medicine. Of the identified faculty in each discipline, 10% were randomly selected to participate. Olenick and Allen needed 231 responses for sample power, given their sample size. Nursing faculty quickly exceeded their 10% response rate of 33, resulting in the need to invite the

next 10% from the other disciplines. A total of 439 faculty responded; 191 were nursing faculty. Based on that response and the IPA method chosen, this study used a purposive sampling strategy. The researcher sought two or more participants from each of at least three different disciplines for breadth and comparison of the lived experiences of these leaders and to improve anonymity in the study results.

The identified deans were contacted by email, phone, or letter, inviting them to participate in this doctoral study. A brief explanation of the study was shared, indicating the focus was on changes involved in implementing IPE in the participant's school or college. Potential participants were informed that Institutional Review Board (IRB) approval (Appendix A) had been granted through St. John Fisher College, the researcher's institution; participation was completely voluntary; and she or he could withdraw from the study at any time. Ethical issues from the Belmont Report were included in the letter and in the informed consent form, indicating there was no anticipated risk in participating in the study, and that all experiences and perspectives would be respected and kept anonymous. The potential participants were informed that data would not be attributed to an individual but to anonymous participants. A request was made for a 75-minute interview that would be conducted in person after written consent (Appendix B) was secured from the participant. The potential participants were also assured that the study results would be shared with the participants at their request.

A total of 14 deans were identified; nine agreed to participate. The participants were asked for names of other deans involved in IPE for snowball sampling. Deans and associate deans were the target for the sample. Smith et al. (2012) encouraged IPA for case studies, noting it can be used with 3-16 participants. Gentles, Charles, Ploeg, and

McKibbon (2015) suggested 6-12 for interpretative phenomenology studies, depending on the intensity of the interviews. Benner's (1994) interpretive phenomenology studies ranged from 1 to 95 participants. This study sought out 6-12 participants.

At the individual in-person interviews, the nine participants were asked to describe their involvement in IPE and transforming the curricula and healthcare system in their respective colleges and disciplines. Their initial thoughts and feelings regarding the changes, their role in the changes, how they as leaders examined change strategies, whether the changes were initiated individually or collectively, and what their positions were on the IPE change now (soliciting cognitive and affective reflections further into the process) were all explored. The participants received a small gift card in a thank you note after the interview; it was not offered as an incentive.

Instruments Used in Data Collection

In phenomenology studies, the researcher is the instrument and the unit of study is the person who has experience with the phenomena, which in this case, is ambivalence during organizational transformation when IPE is implemented. The researcher used semi-structured interviews to learn about each participant's involvement with IPE professionally and as a leader. The interview was used to assess whether ambivalence was part of a participant's response to IPE and organizational transformation (Research Question 1). The questions were used to examine whether a salient sense of ambivalence was identified by the participant as the description of the lived experience was shared and whether the participant reflected on her responses to the ambivalence individually or collectively (Research Question 2). The interview was also used to discern if the

participant was utilizing the identified ambivalence strategically for planning the IPE changes (Research Question 3).

With IPA, the researcher must be open to all ideas and concepts while listening to the participants reflect on the experiences they were sharing (Smith et al., 2012). In the interview, the researcher and participant co-constructed the lived experience of the participant. Smith et al. described the interview as a "conversation with a purpose" (2012, p. 57).

Qualitative research does not conceptualize validity and reliability the same way that quantitative research describes and evaluates these concepts. In qualitative studies, the researcher is still expected to honor the validity of the data, ensuring that the collection and analysis accurately represent the experiences of the participants and the phenomena being studied. The researcher's task is to detail the process used to establish credibility and build reader confidence (Pyett, 2003). Rigor must be demonstrated in the sample selection, the collection, and the analysis of the data. According to Pyett, triangulation, negative cases, and detailed reports contribute to the validity of qualitative research. The questions used for the semi-structured interview are shown in Appendix C.

The introduction and questions for this IPA study were tested in fall 2017 with volunteer IPE champions who were not included in the study. The introduction included the principles from the Belmont Report, and a short paragraph to provide context for the study. The questions were tested to determine if they were uniformly understood and if they yielded responses related to the phenomenon being explored. This practice developed the researcher's interviewing skills. Interview questions were reworded for clarity if any of the volunteers indicated they were unclear on what was being asked.

Procedures for Data Collection and Analysis

The dissertation proposal was approved by the St. John Fisher College DEXL Dissertation Committee, and once revisions were complete, the application to the St. John Fisher College IRB was submitted to secure approval for the qualitative study. Professional contacts and networking were used to identify potential participants, starting in fall 2017 and throughout spring 2018. The list of potential participants was organized by discipline.

IRB approval was secured in February 2018, and the interview questions were finalized. The interviews occurred in March and April of 2018. Detailed lists of interviews (name, position, institution, questions asked, and interview date/time) were kept separate from the transcripts that were used during data analysis. Participants and the subsequent transcripts were coded to protect identities.

The researcher received permission to audio record the in-person interviews and notes were taken simultaneously. The notes were used as a reference during the reading of the transcription of each interview. Smith et al. (2012) recommended interviews be audio or video recorded. In van Manen's (2007) phenomenology of practice, he speaks to pathic sense, pathos, which allows humans to perceive and recognize an atmosphere or mood. This is part of knowing, part of our lived experiences, and is not expressed in written text unless one develops this "phenomenology of sensitive practice" (van Manen, 2007, p. 22). The researcher must be attentive to word choices, moods, and reflections.

While the introduction and a set of questions were carried into each interview, the co-construction of the interview between the researcher and participant required the researcher to use active listening skills, to paraphrase the answers the participant

provided at times in order to verify understanding, and to listen for acknowledgement of understanding or the need to revisit the question and/or answer. In some interviews, the conversation took paths away from the questions. This required use of the pathic sense, that part of knowing, to allow the participant to talk about reflections that were germane to the phenomenon as that person experienced it, but unknown to the researcher. Field notes were taken by the researcher to remember points to connect to later on, or to investigate further once the reflection had concluded.

Interviews were transcribed verbatim. Brinkmann and Kvale (2015) described interviews as living conversations, rich with body language, postures, placement in the room, gestures, etc. When captured as an audio recording, it is the "first abstraction" (p. 204) where facial expressions, positions, body language, and so on are lost. The transcription to text is the "second abstraction" (Brinkmann & Kvale, 2015, p. 204); breathing, tone of voice, inflection, etc., are gone, with only words left. Brinkmann and Kvale (2015) said "transcripts are impoverished, decentralized renderings of the live . . . conversations" (p. 204). Audio recordings of the interviews provided the closest approximation of the living conversation for this study. Along with field notes, verbatim transcripts were used to examine the data for meaning and understanding.

Smith et al. (2012) outlined six steps, which this study used, that are key in the analysis of IPA data. Once the interviews were recorded and transcribed, the researcher read through the material from one case, in its entirety, to see the whole picture (Step 1). Second (Step 2), the content was examined for anything of interest and initial notes were made; more notes were added with each reading, and from these readings, context (descriptions, language and linguistics, concepts) and meaning began to emerge and the

interpretation began. In Step 3, themes began to emerge in the content and notations. Themes could be found in pieces ranging from a few words to chunks that were a page or more that spoke to the same theme. There is no predetermined size for a meaning unit. Smith et al. referred to the hermeneutic circle as one that looks at the whole of the interview, back to the separate parts of the interview, from a word to a sentence, a theme and the whole interview, from comments to themes, back and forth from the parts to the whole, and back again. One can also move back and forth from participant to interpretation in IPA and then to the phenomena in the content and back to interpretation. It is circular and linear at the same time.

Step 4 occurs when the researcher reflects on the importance of the themes and connections across themes, most often in a chronological format. This leads to mapping and interpretation of how the researcher sees the connections and patterns among the themes. Smith et al. (2012) stated that the researcher must remain open-minded in all stages, especially as themes and subthemes are identified. One must discriminate in the analysis and determine if each theme is related to the phenomenon.

Step 5, according to Smith et al. (2012), is to move to the next case, repeating Steps 1 through 4. The analysis must let go of the themes, patterns, and ideas that emerged in the previous case(s). This is part of the rigor in IPA, allowing for a fresh analysis of each case as it if were the first. The analysis must allow new themes and patterns to be identified in each new case. Each transcript was uploaded into the researcher's computer using NVIVO software, then coded using in vivo words, verbatim phrases from the participants, to stay true to the participants' meanings (Flick, 2014). A codebook was built from the in vivo terms, with definitions, sample quotes, and memos.

Step 6, the final step, was looking for recurrent themes and patterns across the cases and keeping track of which case the content emanated from by code or pseudonym to protect the anonymity of the participants. Step 6 can lead to additional levels of interpretation. Every step contains more granular steps, as needed, to reflect further on the experience, the recurrent themes, and the new insights gleaned.

In IPA, the researcher uses presuppositions and expert knowledge in the research design, inquiry, and analysis of the meaning (Lopez & Willis, 2004). Further, Lopez and Willis stated that the researcher has a responsibility to interpret "the meanings for practice, education, research, and policy" (p. 730), an important element in IPA. These research questions helped to guide the semi-structured interviews:

1. Do HEI leaders experience ambivalence during organizational transformation?

2. How do HEI leaders respond to salient ambivalence, individually, collectively or both?

3. Once ambivalence is salient, how do HEI leaders use it to examine change strategies?

Ashforth et al. (2014) contended that ambivalence is seldom studied in relation to organizational change. Ambivalence can lead to the creation of alternative ideas, better decision making, and a stronger commitment to the organization. This study explored the phenomena of ambivalence among leaders of HEI, whether they responded to ambivalence individually, collectively, or both, and whether they used ambivalence deliberately to examine options and strategies for change.

For this study, data from the nine participants was analyzed by the three research questions. For Research Question 1 (RQ1), was there an expression of ambivalence? Data analysis on RQ2 required examining each case, then the phenomenon, to understand whether responses to ambivalence were individual, collective or both. Also for RQ2, the data was analyzed for themes on the triggers of ambivalence to determine what forces impacted the leaders in this study. For RQ3, the data was examined looking first at codes that were change strategies, identifying themes expressed by three or more of the leaders (at least a third of the leaders in this study), then categorizing the themes.

Summary

The IPA methodology was chosen for this study to examine how HEI leaders responded to ambivalence during organizational transformation, and how salient ambivalence impacted their selection of strategies for leading IPE organizational transformation. IPA allowed for the collection and analysis of data on each case, and across the phenomenon.

IRB approval from St. John Fisher College was secured in February 2018. The in-person interviews with nine academic leaders of nursing, medicine and pharmacology schools occurred in March and April of 2018. Transcription and data analysis occurred through June 2018. Transcriptions of the interviews were kept electronically on the candidate's computer and will be purged after 5 years. Hard copies used for coding will be kept in a locked cabinet at the researcher's home for 5 years, then will be destroyed.

Chapter 4 provides the findings of the study based on the IPA data analysis. Results from each case are presented, followed by the findings on the phenomenon, which are analyzed according to the research questions.

Chapter 4: Results

Introduction

   The purpose of this qualitative interpretative phenomenological analysis (IPA) study was to examine whether academic leaders experienced ambivalence during organizational transformation and, if so, how they responded to the ambivalence and the strategies they employed to lead the transformation. A purposive sampling method was chosen using professional networks and snowball sampling to identify participants. A total of 14 academic leaders were contacted for the study; nine of them agreed to participate. These leaders were from five different campuses in Central and Western New York, representing both private and public higher education institutions.

   The term *campus* will be used to refer to the university or college where the leaders worked. The participants were identified from campuses where two or more schools conferred graduate-level healthcare professional degrees. The term *school* will be used to refer to a college or school led by a dean. The participants were leaders in nursing, medicine, and pharmacology schools; there were at least two participants from each profession. All nine participants and their campuses were actively engaged in IPE, which is the context for organizational transformation in this study. Understanding if leaders experience ambivalence, how leaders respond to ambivalence, and the strategies they used to pursue organizational transformation can assist leaders when charting a course for change.

Research Questions

Chapter 4 presents the findings of the study, based on these research questions:

1. Do HEI leaders experience ambivalence during organizational transformation?

2. How do leaders respond to salient ambivalence; individually, collectively, or both?

3. Once ambivalence is salient, how do leaders use it to examine change strategies?

Data Analysis and Findings

This section begins with the results of each case, a unique aspect of the IPA phenomenology method. The analysis then moves on to an examination of the phenomenon and the similarities and differences across the cases, resulting in the categories and themes that emerged from the data.

The participants were interviewed in their own offices. Consent forms were collected from each participant and are secured in a locked file in the researcher's home office. Semi-structured interviews were audio recorded and transcribed, and field notes were made by the researcher.

The IPA methodology engages the researcher and the transcripts in a six-step analysis process. Step 1 is a complete reading of the transcript to gain the big picture of the case. Step 2 involves taking notes on what has been shared by the participant to begin identifying key information and potential meaning units. By Step 3, the case analysis is revealing key concepts and potential codes; the analysis sways back and forth between meaning units and the interview as a whole. Step 4 engages the researcher in reflection,

analyzing the importance of codes, themes, the connections between themes, and patterns that emerge. The researcher must discriminate in the analysis as to whether the emergent data and themes are germane to the phenomenon.

Once these steps are complete, Step 5 is to move on to the next case, then the next, following Steps 1-4 until all cases are analyzed. The researcher must do a fresh analysis on each case, as if it were the first. Once Step 5 is complete, the emergent themes, patterns, and insights from across the cases are analyzed in Step 6. This chapter provides the essence of each case, followed by the themes that emerged in the analysis of the leaders' responses to ambivalence during organizational transformation, and their discussion of the change strategies they selected to lead organizational transformation.

Case Findings

Each case includes three sections. The first section situates the context of the transformation for the leader, including the forces and factors that impacted the change as experienced by the leader. These forces and factors are described through the lens of the participant, and whether ambivalence, if any, was expressed by the leader as an individual experience or as a collective experience by a group in which the leader belonged. The second section is the leader's response to expressed ambivalence. Did the person examine the ambivalence alone, with others, or both? Finally, the strategies chosen to lead the transformation are presented, along with the expression of whether ambivalence was a factor in the selection of the strategies chosen.

Leader 1. Actively engaged in academics for years, this leader shared her entry into IPE and transformation. She pursued IPE because she said it was the right thing to do—it is focused on patients. "We've got all the IOM [Institute of Medicine] data that

shows how important interprofessional communication is . . . patients who were injured because of . . . all the barriers that are part of human dynamics . . . hierarchy . . . complexity" (D1, L283-287).

She was concerned about factors such as faculty workload, mandated curriculum requirements, and barriers posed by different schedules for the different degree programs and students. "Scheduling, I've heard over and over again, from dean colleagues who recognize the importance of this work, how scheduling is probably one of the major barriers" (D1, L69-70). Equally concerning were the silos and the slow progress made with IPE internally on the campus. "We were siloed, and they were siloed. Once their accreditors required IPE, they [came] out of their silo." (L52-61). "I don't think anybody would've argued about it [that IPE was the right thing to do]" (L262), but the challenges of curriculum mandates, different schedules, logistics, and silos delayed progress and led to ambivalence.

Leader 1 responded to the ambivalence she felt through conversations with other healthcare leaders. Using a strategy called *joining maneuvers*, she tried to identify common ground within the campus and the region.

> In my clinical role, who would argue with me when I would say, "We need to figure out what's best for this patient. What's your idea? Where are the conflicts? How do we get by these barriers and move forward?" . . . I think I approached [IPE this way], except what's best for our students. (D1, L311-317)

Her faculty were teaching courses with high enrollments and were practitioners who knew the healthcare needs in the community. She found grants to engage and incentivize them in leading IPE initiatives. "Our faculty are out in the community . . .

they bring back the concerns of healthcare organizations . . . what they're looking for from our graduates" (D1, L76-80). New funding led to new initiatives, resulting in high impact learning experiences for the students. She explained the importance of grants in moving IPE forward with the faculty.

> Our faculty are very busy. To ask them to do something additional, like take on this IPE, but putting IPE together in a grant gave me additional resources to pay them for additional time and work over the summer. You can't do anything without resources. (L131-135)

When leading change internally was slow, she began forging connections outside the campus using *boundary spanning*:

> Boundary spanning . . . I move about in the community. I figure out . . . the needs, what we can do, what other people who I work with might be able to do that I can't do . . . in the interest of student learning . . . and the community." (D1, L542-546)

Faced with her desire to move ahead, but with slow progress on campus, this leader assessed the options. Using data, getting grants, empowering faculty, being part of regional and national conversations in healthcare, and tapping community connections, Leader 1 was advancing IPE. The use of boundary spanning helped her identify needs and connections with others to lead the transformation, and using joining maneuvers helped her find common ground with other partners when progress was slow.

Leader 2. This leader identified accreditation standards as the number one reason for pursuing IPE and transformational change in her school. Other compelling reasons included her identification with interprofessionalism as part of her profession. "We've

known for many years that working together among other healthcare professionals is essential . . . . Working as a team is . . . what we do" (D2, L51-59). Accreditation made IPE a high priority. Leader 2 believed IPE makes sense. "The idea of doing it, I think, everyone gets, everyone understands. We see the value, this makes sense" (L167-168). She also said her faculty were on board. "The faculty have actually been very good about really embracing this" (L320-321).

Leader 2 said several factors confounded progress, including identifying the right assessment goals and methods. Accreditors require IPE. How to implement it and measure it is up to the schools.

> The challenges are enormous. Everyone asks, "What is enough to really meet the outcomes? How do we measure this?" . . . Where do we see the full benefit of the effort, time, commitment, sacrifice that is being made to put this in place? (D2, L198-204)

Various class schedules across programs, ranging from daytime to evenings to weekends, made the logistics of matching up students daunting. As a leader, she felt concerned that this transformation required the willingness to compromise, a tremendous amount of resources, and the silos on campus were barriers.

Leader 2 expressed a clear sense of ambivalence, stemming largely from the push from accreditation and the belief that her profession was already interprofessional, while facing the major challenge of how to establish IPE and assess the IPE outcomes. "My challenge is how much is enough?" (D2, L299). Later she said, "Even without the accreditation standards, why would we be doing this unless it's really impacting the students and really making a difference?" (L358-360).

When asked how she worked through the push/pull factors and feelings, she indicated that early discussions at national conferences centered around IPE and accreditation. She laughed and said, "I probably agreed with some of those and maybe drove some of those conversations. 'Do we really need to do this? This is going to take time, effort, energy, money'" (D2, L262-264). Leader 2 responded to collective ambivalence with peers in her academic profession and worked through that ambivalence collectively with others in her school and at professional conferences.

When asked about leadership strategies for change, she identified several. Assessment had been both a push and a pull. She worked with people in her school to codify an IPE plan that included curriculum changes, assessment plans, and student outcomes. "Accreditation tells us you need to have IPE, you need to assess it, and you need to show your outcomes. You guys figure out how to do it. . . . We started IPE . . . [with] numerous activities and an annual evaluation" (D2, L211-223). She continued:

> This has been a faculty-led initiative; it's empowering faculty . . . . Activities have been very faculty-driven. I have stepped in over the past couple of years . . . and charged our associate dean, saying, "I don't just want a laundry list of activities." We need an IPE plan, and an assessment plan to go with it. (L329-344)

Early adopters were identified, a deliberate strategy to make sure IPE was faculty-led. "I am of the mindset that faculty-driven is a very key piece . . . when there is a faculty-driven piece, a lot of the other faculty will get on board with that" (D2, L413-417). An infrastructure was established within the school when an associate dean was tapped to lead the IPE plan and assessment, then an IPE committee was established in the school. The members of the committee also served on the IPE committee at the campus

level. When the IPE committee faced hurdles, they brought the deans in to get executive leaders at the table for difficult decisions.

Leader 2 said change, "has to be intentional . . . something the administration wants . . . it will turn a bit of the curriculum and program upside down to make it fit" (D2, L173-174). She spoke of the need to continuously assess strategies and to compromise. "It's challenging, and it's hard." (L681).

Leader 3. Accreditation standards were the most compelling reason for pursuing IPE for Leader 3. "I think all of us are being pushed by accreditation. Some are being pushed more than others . . . if we didn't have a good . . . 'shove' by our accreditation body, we wouldn't be pushing as hard on it" (D3, L326-331). This leader's reasons for diving into IPE also included the desire to change healthcare practices. "If you start [with] students who become practitioners, practitioners will be comfortable [with each other]" (L44-45).

While compelled to dive into IPE due to accreditation requirements, Leader 3 listed a number of factors that were slowing down the transformation. The mandated curriculum concerns were a main topic. "Squishing it into a difficult curriculum can be hard . . . putting IPE on top of a very busy schedule. It's the same for all health science students" (D3, L174-179). She and her peers found the logistics challenging, given how many different school calendars and class schedules had to be consulted, let alone matching student experiences and knowledge. She explained, "I think our faculty accept IPE and accept assessing outcomes. Some of them are realistic and say, 'In the real world, it doesn't happen like this . . . you can't get your entire healthcare team to meet about every patient'" (L234-237). A disappointment was that a key school did not seem

to be on board. This leader was also concerned with costs. "The cost of it [IPE Office] is quite high. . . . While we've started to do some good IPE . . . I want more value for the dollar" (D3, L121-125).

Leader 3 said she felt torn between the compelling forces and the constraints she faced. She responded to her ambivalence collectively in her school with peers, at campus IPE committee meetings, and at national conferences for her profession. "People talk about the things they do, but nobody really talks about how they manage the challenges, because I think everybody has very similar challenges" (D3, L210-212).

Strategies to establish IPE as integral to healthcare education at this campus included building an infrastructure for the IPE office, hence the costs. The campus had a holistic approach to IPE, engaging disciplines outside of traditional healthcare fields. This leader articulated the use of intentional relationship building: "Our approach is to look for opportunities and persuade people to play with us in the sandbox" (D3, L311).

Leader 4. This leader demonstrated excitement regarding IPE and changing healthcare education. She shared several stories to illustrate how important and well-established IPE was on the campus. Some of it stemmed from a legacy with faculty, a few decades earlier, who did their doctoral work on interprofessional collaboration.

Most of the interview focused on their evolving infrastructure, that IPE is essential to the patient, and that her profession exists to serve patients. She said of IPE, "I think there's an understanding that this is the right thing to do, and we're all on the same team" (D4, L134-135). IPE is a high priority for this campus. Leader 4 shared that there was "a commitment from the very senior people . . . this is the right thing to do . . . we want to move forward for . . . the education of our students, which ultimately is for the

56

best outcomes for our patients" (L148-150). Stories of students from across the schools learning TeamSTEPPS (a federal program for teams in healthcare) together increased interaction among students, and national grants funded major initiatives that changed healthcare education and practices on the campus.

Asked if she had mixed feelings or concerns about IPE and the changes for the school or the campus, she said, "No, there were never any mixed feelings" (D4, L161). Exploring further, regarding her faculty, she said that faculty that had no mixed feelings due in part to the legacy, and to their practitioner role—they see the patient as their primary concern in the clinic and in the classroom. Leader 4 did say that not all faculty were on board, but those faculty were not ambivalent. She explained, "they're the old guard . . . . How there could still be that thinking is beyond me . . . those silos still exist" (L463-467).

Reflecting on the leader's role and building relationships, Leader 4 said, "What we do is special. It's the relationship we [senior leaders] have. The respect we have for each other's professions. This collaboration is key. . . . We'll always be collaborators" (D4, L509-519). She concluded by saying, "You have to have people that want to be together and that want to, and can, advance the mission" (L520-522).

Leader 5. IPE efforts are relatively new for this leader and her school. While accreditation requirements were the primary reason for their entry into IPE, the conversation unfolded around why IPE should be pursued. She spoke of the need for a *just culture* where all healthcare professionals are respected. Regarding her profession and their engagement in IPE, she said, "[We] have always worked interprofessionally" (D5, L252).

Engaging in IPE was a "stated priority" (D5, L57). Leader 5 explained that the school had many priorities and many challenges. Students were in different places in clinical experience levels and in schedules. "They are all graduate students, but different levels of graduate students, which has caused some issues" (L48-49). "One of the issues is that our students are primarily working adults . . . . Whereas in [another school], they are likely to be full-time students who live here and don't have families" (L82-88). Another concern was that the faculty who were most engaged in the IPE committee decisions felt "herded by one of the programs involved" (L105). Some of the conflict was due to an established curriculum with licensing mandates, which was hard to change. She was concerned that the faculty workload was already high, and with IPE, working across silos on campus could create conflict. She said, "junior faculty felt more easily railroaded . . . and it's also . . . a female-dominated profession" (L123-144).

Ambivalence for this leader and some key participants in this school came from the pull of having always worked interprofessionally and having the desire for a just culture (where all professionals are honest and respectful with each other), juxtaposed with the push of accreditation demands moving the campus forward very rapidly.

> Another big issue is resources and how much time it's taking, not only for the group that's planning things, but also for our [champion] who did not have her secretary . . . we've had some [staff] shuffling, and it's putting a lot of pressure on people to carry the load. (D5, L149-155)

The response to ambivalence was collective. "There were conversations within the committee, then with faculty outside of the committee, and the deans consulted with others as decisions were made" (D5, 194-197) to put more tenured faculty on the IPE

committee. Leader 5 said the faculty "know that somebody's got their back when they hit challenges" (L360).

As the organizational transformation unfolded, Leader 5 and her school chose strategies. They began with attendance at national conferences to glean insights and resources, then an IPE committee was created to plan for the changes in curriculum, activities, and assessment across schools. Committee membership deliberately engaged faculty so that efforts were faculty-led, later adding more tenured faculty to provide security for junior faculty who were feeling *herded* by others. The campus named an associate vice president to oversee IPE, a respected leader above the deans in the organization. Asked about strategies for changes moving forward, she replied "It's new. Anything new you have to get in there and try it and see what happens. You make adjustments as you go along" (D5, L375-376). Leader 5 concluded "in leading this type of change, you have to be cognizant of how communication is flowing and how it's affecting various parts of the system so the system . . . can get stronger" (L396-398).

Leader 6. This leader helped establish IPE years earlier, as a faculty member. She had been one of several IPE champions, in addition to her full-time role as a faculty member and a practitioner at that time. Her commitment to IPE came from a focus on patients and her perspective that healthcare is best as "a team sport" (D6, L246). She advocated the need for a just culture (respect for all professions) and talked about the importance of faculty as role models. "We can teach the students how to do this, but then . . . they have role models who aren't doing it, and that's a challenge too" (L204-206).

There were trials. Most of the challenges boiled down to an unclear picture of how IPE should be taught. It led to lots of discussions and brainstorming, then the same

59

discussions would be repeated each semester, including tackling the logistics of how to bring students together for IPE events. She also faced the force of *old school* faculty and the healthcare hierarchy with the perceived power that physicians hold. And, there were silos on campus. Leader 6 reflected on her view of healthcare in visual terms.

> It's like a chess board . . . there's different roles and different ways that people move. Then flattening that chess board, so maybe the king doesn't have so much power . . . . The king is physicians . . . What we really need is a team sport where everyone has different roles, but they are all important to the goals. (D6, L237-247).

Leader 6 identified her own ambivalence. She reflected on the role conflict she had felt in prior years. While she was an IPE champion, her role was in conflict with her profession and how those in her profession viewed IPE.

> My department chair did not recognize my IPE work as valuable. My chair said, "We already do IPE. We don't have to spend time doing this. We already do it." We don't already do it. We do multidisciplinary teams, we communicate, but we don't communicate as well as we could . . . . Working across departments is still doctors working with doctors. (D6, L282-287)

She processed her ambivalence individually. "It was an eye-opener. I realized this thing [IPE] I've been studying, that nobody really got it . . . that it takes a lot of work to make other people understand why this is important" (L288-290).

Eventually, Leader 6 responded to her ambivalence through discussions with the members of the IPE champion team. Although they represented different schools, they were all facing the same frustrations inherent in initiating change across the campus.

Everybody on the team had the same issues, so we talked a lot about it. We would

go to [Dr. X, to whom they reported] and say, "What can we do?" She didn't have

a solution either, but she kept us in front of the deans." (D6, L317-321)

Leader 6 initially responded to ambivalence individually. Her response became collective

when the IPE champion team members expressed the same concerns.

When asked about strategies for leading the transformation, Leader 6 was very

clear about the strategy employed by the IPE champions on her campus:

I think we did all of Kotter's [change model] steps [laughs]. We . . . used the

accreditation to our benefit, 'We need to do this.' We created a sense of urgency.

We developed buy-in as best we could. We had a retreat . . .it was a turning point

. . . it made it real, and we got a lot of positive feedback from people . . . in

leadership positions across the university . . . . We developed our strategic plan

and . . . the job description for the person we hired to lead IPE. (D6, L368-382)

Ambivalence occurred for this leader individually, then collectively. She used her

ambivalence with campus leaders to select the strategies needed to launch IPE.

Leader 7. With years of experience in IPE and in leading change, Leader 7 stated

simply, "The impetus for the movement came from accrediting bodies . . . . They [other

professions] realized they would be required to document IPE in their next accreditation

visits" (D7, L21-27). For her profession, nursing, she believed IPE "is part of what we've

always been" (L192). She noted that IPE was something her school taught to both

students and practitioners, and while accreditation was pushing it, IPE was important for

a just culture.

Leading change is not without challenges. A number of factors were listed as impediments. A primary concern was that changing a full curriculum takes resources and money. She expressed concern that not all faculty were on board across the campus, and that the workload for her own faculty was already high. As she looked out the window at other buildings, she noted there were silos on campus.

When asked if she had any mixed feelings or concerns, she replied, "I've been doing this for years; I don't know that there are any conflicting thoughts or concerns" (D7, L121-122). Then she added, "The only conflicting thought is that there is no top dog in this. We have to make sure everybody understands that" (L123). When asked if she thought her faculty might be ambivalent, she responded that students and faculty who were engaged were not ambivalent. "It's those who might not be quite as engaged who are ambivalent about it. This is nursing, I don't think we're ambivalent about interprofessional. That's what we do" (D7, 187-189). As a leader, she reached a point where IPE was simply the right thing to do. "This is part of what we've always been, so this doesn't feel odd" (L192). She was not ambivalent but knew others might be and needed support to become part of the IPE paradigm.

Leader 7 deliberately chose to make IPE faculty led, engaging faculty to reach the tipping point, motivating others to come on board. "It's [faculty] modeling . . . how does this work, what are students saying . . . . We give deans more power than they actually have. Or think they have more power than they do" (D7, L245-249).

Leader 7 clearly identified the role of the leader and the strategies employed in organizational transformation. She said deans need to develop the infrastructure, find the right people to carry out the work, and then support those who lead the change.

The deans . . . are very supportive of this. We're not only paying money, but

we're really promoting it and pushing it . . . . We've hired the director . . . that's

the person who takes the lead, who has a committee of members from each

school" (D7, L210-222).

The IPE committee was holistic in the representation of professions from across campus.

With her own faculty, she helped them reframe their concerns. "This is how we

educate our interprofessionals" (D7, L111), "it's how we build scholarship around what

we're doing" (L153). She engaged faculty. "I think it has to be a grassroots effort . . .

that's where it has to come from" (L245-246). She said their next step was sustaining the

infrastructure by identifying new internal and external funding partnerships.

Leader 8. This leader had been engaged in transformative change for a number of

years. She articulated the context, ambivalence, responses, and key leadership strategies

clearly in the interview. Leader 8 outlined the context for IPE on her campus. As a

learning organization, "healthcare is a team sport; we all need to practice as teams; we all

need to develop mastery and expertise as part of a learning organization" (D8, L140-

141). Second, she stated that they needed meaningful change. "We figured out how to

speed date around IPE with our students . . . our early learners, but . . . interprofessional

education needs to be juxtaposed in professional practice. That's what our current

workforce needs the most" (L51-68).

The third motivator for change was the focus on patients. "We infuse workplace

learning education around . . . quality improvement in patient safety . . . and do that in an

interprofessional way" (D8, L81-83). Quality improvement adds value to an organization,

so strategic alignment and value was the fourth compelling reason IPE became a priority.

Leader 8 said, though, that the separate schedules and curriculums of each school and profession created major obstacles. This was further exacerbated by the amount of clinical experience different students had. New graduate students in some programs came in with clinical experience, while new graduate students in other programs had no clinical experience. Matching students up was an extreme challenge.

Then, the cultural baggage that some professionals carried became heavy. An example was a story of when some leaders on campus expressed concern that not enough IPE was occurring. The response was, "It's a little bit like having a party; [others] had a party and they invited you. You've never thrown the party and invited them . . . IPE isn't just going to appear . . . " (D8, L184-192).

This leader's ambivalence was salient. "I think anyone in leadership . . . it's this push/pull between reading the tea leaves and understanding where strategic alignment is, and power and position, and resources, to what is your philosophical aim and what's right" (D8, L131-134). Her ambivalence resulted in role fatigue.

> I had a very clear identity around being the leader for interprofessional education, but . . . [you're the] asker for all these things . . . . I developed a lot of fatigue . . . it didn't bring me a lot of joy . . . I believed in it and I was passionate, but I was negotiating around things . . . and the obstacles seemed really large. (D8, L142-149)

Leader 8 expressed concern that many IPE leaders have IPE fatigue. She contended that for IPE to be sustainable, senior leaders need to value IPE and make it a high priority, supporting it with resources "because it's a lot of fighting" (L155).

Leader 8 recognized her ambivalence and responded by talking with a mentor and with colleagues in her professional network. An extrovert, she knew she needed to process her ambivalence with others. Part of the ambivalence also came from her own needs. "I need to feel like I'm on a team" (D8, L232). She identified key players, built IPE teams, provided team training, and came to feel like she was a part of those teams.

Once the ambivalence was salient and processed, strategies for leading change became clearer. She redefined her role, wrote grants to secure funding for new initiatives, built connections to identify key participants for teaming and change, and helped campus leaders build an innovative vision for healthcare education. She engaged in *boundary spanning* outside of the campus to enhance the IPE efforts in the region.

As the interview neared the end, some new ideas surfaced. Leader 8 said that hierarchy and power have existed in health professions for decades. But she reframed it and posed a new perspective: "Maybe 30 years ago we needed to think about modulated behavior, and it was a power and hierarchy issue, but now I really think some of the outward behavior is a wellness-burnout issue" (D8, L377-379). She pointed to strategies for enhancing resilience and wellness, rather than dealing with power issues.

She also found that, "the disruptive innovation of technology in the practice of healthcare and in the education of healthcare . . . has . . . disconnected us from each other . . . . [It] has created a greater divide than maybe some traditional power and hierarchy pieces" (D8, L356-360). Her solution was interprofessional education in order to reconnect people and build community. She believed technology needed to be a player at the table in solving connection problems, rather than being a cause of division. Leader 8 was using ambivalence to generate innovative strategies in organizational transformation.

Leader 9. This leader found implementing IPE in healthcare education to be compelling because of her focus on patients and her commitment to the importance of teamwork. During the interview, she articulated the need for students to understand that they must model the way in healthcare. The value of IPE contrasts with the realities in the workplace, but the demands of accreditation keep them attentive to how to make IPE work. Regarding teamwork she said, "[there are] clinicians who've seen what it takes to care for people . . . and realize 'I need help, we need to work together'" (D9, L643-645).

She spoke of the value of IPE in terms of how students must see it. "We have to be really creative . . . so students come away thinking, 'That was really important. I see why I can't do my job well unless I know how to do this.'" (D9, L148-153).

The challenges Leader 9 identified were the logistics of running events for hundreds of students and offering them multiple times a day to match schedules, getting enough facilitators, and using real-world issues. Her school also worried about a packed curriculum, and the burden of responsibility. For real-world issues, she drew a picture of what happens in hospitals and clinics. "Is there a space where you can sit and talk to your nursing colleagues? Is there a pharmacist on the floor? When are you going to see these people to talk with them? Just the practical barriers to . . . interaction" (D9, L358-362). She said the theory was good, but reality may be very different.

As for the packed curriculum, she said IPE is only one example of new things that people are trying to add to their mandated curriculum. One of her colleagues likened it to a refrigerator. "You can't put new groceries in unless you take things out . . . you can't close the door it gets so full" (D9, L65-67).

Leader 9 said that she had no mixed feelings or conflicting thoughts about IPE. She felt no ambivalence. She believed strongly in the team approach to healthcare. When she was asked about her colleagues, however, a different perspective emerged. The *burden of responsibility* surfaced.

> You still have . . . those who have to bear the burden of bad things . . . calls tend to fall on the physician . . . lawsuits come to the physicians. They feel like they have to be captain of the ship, and it's really hard to depend on others when they can go home at night, and that person has to sit and worry about the patient all night long, or it never leaves them. They feel the burden of responsibility (D9, L646-651).

When asked again if there was ambivalence, she replied, "Yes. Providers are . . . feeling that push and pull of wanting teamwork, very much so, understanding it, and yet, having that other pull of it's all going to fall down" (D9, L674-679). When asked about how her colleagues resolved their ambivalence, she said it depended on their work. Those who work in teams (emergency departments, operating rooms, etc.) had expressed the importance of teams. She was not sure others would resolve it anytime soon, which led to the strategies used in transformation.

The first three strategies looked at what the school and the campus could do. Leader 9 pointed to the infrastructure that had been established by senior leaders, including an IPE director, a financial commitment from the schools engaged in IPE, and a leader from each college serving on the IPE team. Second was assessment. They used the Interprofessional Attitudes Scale (IPAS), a nationally recognized instrument for measuring student attitudes regarding IPE. Third, the IPE committee was deliberate in

developing comprehensive, holistic cases for students as a team and for creating faculty

development materials to assist faculty in facilitating small group experiences with

students from across the professions. Tips on valuing different perspectives and helping

students understand the insights and breadth that comes from team work were provided.

The fourth idea for leading change looked outside of the campus at a systemic

solution. This leader believed the healthcare system needed to change to support IPE. It

was a reference back to the burden of responsibility.

> If this patient isn't getting better, the whole system doesn't get reimbursed. . . . it
>
> falls down on, "Why couldn't you get them better . . . faster . . . this is your fault."
>
> So, the system has to change as we become more team oriented . . . everybody
>
> else has to catch up too, insurers, legal system, everybody. (D9, L659-666)

While there was no expressed ambivalence at the personal level, there was

awareness that some colleagues experienced ambivalence with changes in both healthcare

education and healthcare practice. Leader 9 articulated that transformation strategies were

needed for students, for the campus, and for the healthcare system.

This concludes the individual case analyses. The next section of this chapter looks

at the findings across the cases regarding the phenomenon.

Phenomenology Findings

Most of the participating leaders had been engaged in transforming their schools

for at least 6 to 7 years. One leader reported that the process on her campus began in

2007; seven had been actively involved since 2011 or 2012; one started later. All nine

were in primary leadership roles in the IPE transformation process. The remainder of this

chapter analyzes the phenomenon of whether leaders experience ambivalence during

organizational transformation, and if so, how they responded to that ambivalence, and finally, how they selected change strategies when ambivalence was present.

RQ1: *Do HEI leaders experience ambivalence during organizational transformation?* Research Question 1 was asked to determine if leaders experienced ambivalence during organizational transformation. Finding 1 was that six of the nine leaders identified their own ambivalence as they led their schools into IPE organizational transformation; this is 67% of the leaders in this study. Three of the leaders, or 33%, did not express their own ambivalence.

Two leaders did not personally experience ambivalence; yet, they did recognize some others involved in IPE on their campuses felt ambivalent. Leader 7 said "those not quite as engaged are more ambivalent about it" (L187). Leader 9 expressed no personal or professional conflicts or emotions. Regarding her peers she noted, "people who work in teams fully understand the value of having a team . . . . But . . . we still have some old school people who were trained in a different era" (D9, L211-222).

Leader 4 said she was not ambivalent, nor were her faculty. "Our faculty are still active clinicians . . .our frame of reference is team-based care. It's just a normal part of what we do . . . for the outcomes of the patients" (D4, L193-195). She observed, "it's been good that it hasn't been part of our accreditation yet. I'd rather people . . . . say this is the right thing to do" (L270-272). This leader was in the *no ambivalence* category.

The six leaders who expressed ambivalence are included in the analysis of answers to RQ2 (response to ambivalence). The eight leaders who identified ambivalence (their own or others) are represented in the responses to RQ3 (strategies for change).

RQ2: *How do leaders respond to their ambivalence; individually, collectively, or both?* Finding 2 was that two of the leaders initially experienced individual ambivalence; one with role conflict, one with role fatigue. One processed it individually, the other talked with her mentor. All six of the leaders eventually experienced collective ambivalence and responded collectively by talking with multiple people. Hence, they all responded to their ambivalence at the level(s) where the ambivalence was triggered.

Two of the six participants who expressed collective ambivalence said of all the forces compelling them to establish IPE, the accreditation mandate came as a "shove" (D3, L332) before they and other professions were fully on board. As Leader 2 explained:

> [We] don't work independently . . . . We see the value . . . let's train [all] these
> students to work together while they're students, so they work together effectively
> . . . in the workplace. I think everybody wants to do [IPE]. It's the practicality of
> doing it that's extremely challenging. I'm not 100% convinced that this is worth
> all of the tremendous amount of effort and energy. (D2, L169-206)

Leaders 2 and 3 experienced collective ambivalence in their profession and responded collectively. They talked with peers in their profession on their campuses and at professional conferences. The accreditation requirement was a collective trigger according to the Ashforth et al. (2014) model, and these two leaders demonstrated a collective response to their ambivalence.

In addition to the accreditation requirements, other forces impacted Leaders 2 and 3 as they contemplated the transformation they were to lead. Positive forces included the desire to start with students to change healthcare practices, a belief that the profession was already interprofessional, that the theory behind IPE was good, and it was the right

thing to do for patients. Negative forces included the logistics involved in IPE, the challenges in matching up students and their different experience levels and schedules, the costs and resources involved, silos, and the hierarchy within health professions.

Four leaders were not mandated to initiate IPE to meet accreditation requirements, yet they expressed feelings of ambivalence. Common themes emerged as forces for change. All four identified *patient focus*, a concern for patient safety and patient outcomes. Three of the leaders named *just culture*, where all professions respect each other, as a key reason for healthcare education changes. The focus on patients and a just culture were catalysts for these leaders, motivating them to pursue meaningful change.

These four leaders engaged in transformation by choice, yet they confronted barriers to meaningful change. Leader 8 called them *hurdles*. "We just have a lot of hurdles . . . a lot of cultural junk that prohibits some of this meaningful education . . . that gets to patient outcomes, efficacy, safe hospitals, and higher levels of care" (D8, L513-520). These hurdles are logistics, curriculum challenges, faculty workloads, hierarchies in healthcare, resource constraints, resource demands and costs, and silos. Willing to lead the way into new territory, these leaders were challenged by forces that contributed to a push/pull between the old way of doing things and efforts to move into a new era.

Leader 6 felt ambivalence in her role in her college and initially processed it individually. She explained: "I didn't translate that understanding . . . until I actually lived IPE with the projects that we worked on. Those projects were building a meta picture. . . ." (D6, L123-126). When occasional challenges occurred within the IPE champion team as they worked on strategies and events, she realized they were the meta-picture of IPE at the campus level and processed this ambivalence collectively.

All six leaders who expressed ambivalence in leading change with their schools and campuses responded to their ambivalence collectively. They consulted with others who were campus leaders or professional colleagues—inside and outside of their own campus. Some discussions vented frustrations, some were focused on problem solving, and others focused on generating ideas and innovations with external partners.

Finding 3 was that two categories of forces emerged as the leaders described the triggers for their ambivalence. These leaders named compelling forces, or catalysts, and repelling forces that were barriers. The catalysts served as motivators for the leaders as they promoted organizational transformation. Table 4.1 lists ambivalence triggers; these forces were named by three or more of the six leaders with salient ambivalence.

Table 4.1.

Ambivalence Triggers (Forces)

Catalysts	Barriers
Accreditation*	Logistics* (schedules, students, etc.)
Patient focus	Resources and costs
Spans students to practitioners	Silos
Healthcare is a team sport/team work	Hierarchy in healthcare
It's who we are, it's what we do	Curriculum full of mandated content
Just culture	Faculty workload

*All six leaders with salient ambivalence identified this trigger.

In the next section, the data gathered for Research Question 3 on the change strategies examined and selected by the participants is presented. Categories and their companion themes are found in Table 4.2, which summarizes the change strategies.

RQ3: *How do leaders use ambivalence to examine change strategies?* Six of the nine participants identified ambivalence in their own response to organizational transformation, and two more identified ambivalence among those with whom they worked. Finding 4 was when leaders examined strategies for change considering the ambivalence they personally experienced, or had recognized among others, eighteen themes emerged, which were then clustered into five categories.

Table 4.2

Summary of Change Strategy Categories and Themes

Category	Themes
Leading role	Helping people see the vision
	Reframing expectations
	Making change a high priority
	Finding the right people
	Securing resources
Building infrastructure	Establishing an IPE committee
	Naming champions or a director
	Planning and assessment
Empowering faculty	Early adopters
	Curriculum
	Model the way
	Tipping point
Boundary spanning	Identifying needs and connections
	Using a holistic approach
	Building relationships
	Spanning students to practitioners
Joining maneuvers	Common ground
	Compromise

The first category is *leading role*. All the participants spoke of the dean's role or the role of leaders in bringing about change. The leading role category encompasses five themes: (a) *helping people see the vision*, (b) *reframing expectations*, (c) *making it a high priority,* (d) *finding the right people*, and (e) *securing resources.*

The second category is *building infrastructure*, used by eight of the participants. Some participants used the word infrastructure, some spoke about the structure needed for IPE. This category includes (a) *establishing an IPE committee*, (b) *naming champions or a director*, and (c) *responsibility for planning and assessment* of the work.

The third category is *empowering faculty*, which was a deliberate strategy used by the leaders to make IPE a transformation that was faculty-driven. It contains the themes of: (a) *early adopters*, (b) *curriculum*, (c) *model the way*, and (d) *the tipping point*. Four of the participants used this strategy, or half of the participants who identified ambivalence on their campus.

The fourth category is *boundary spanning*; it was used by seven participants. It contains the themes of: (a) *identifying needs and connections*, (b) *building relationships*, (c) *using a holistic approach*, and (d) *spanning students to practitioners*.

The fifth category is *joining maneuvers*. It encompasses the themes of: (a*) finding common ground*, and (b) *compromise.* It was referenced by four of eight participants who identified ambivalence and was used when progress was slow.

Category 1: leading role. When leading others through change, the role of the leader is vital in moving the organization along. This category provides the leader with opportunities to communicate the new direction to others and to persuade those who may feel ambivalent about new directions. The first theme is helping people see the vision.

One leader explained it this way: "Having the vision, figuring out a way that it can be incorporated into the expectations for faculty, . . . what the accountabilities are, but not overburdening people" (D1, L389-39); this helps others see the fit with the bigger picture. Another leader described how she helped others see the big picture. "I'm drawing . . . at the whiteboard; I'm trying to make sure we're all on the same page about the vision and direction of what we're doing" (D8, L308-310).

The second theme, reframing expectations, helps those who were ambivalent or reluctant to see things differently. Leader 7 said, "This is . . . finding that balance between what is your own disappointment, holding on to that as an important identity, as well as saying how is this a part of the whole" (D7, L275-277). She assured the faculty this was the right direction, "It's how we educate our interprofessionals" (L111). When some people expressed workload concerns, she told them, "It's not an addition . . . it's part of how we build scholarship around our work, everyone can take advantage of . . . IPE research . . . in the community or in global health initiatives" (L153-155). She was helping her faculty see how the transformation fit with the work they were already engaged in. Leader 1 said, "There's some leadership around that . . . an expectation for faculty that you will do this. This is part of . . . their service here in their faculty role" (D1, 384-389).

The third theme in the category of leading role is making change a high priority. Where IPE is a standard in accreditation, change was a high priority. "Pharmacy leaders have been pushing IPE at the forefront, and they've been recruiting and pushing the other professions . . . there is recognition that if it's not in other healthcare education

professions standards, it will be" (D3, L36-39). From another profession on a different campus, a participant explained it this way:

> High priority is more than just words; high priority is also about infrastructure, resources, people, and social cultural change. It's a priority for us, but I'm not sure we've had the follow through for me to say it's a high priority. (D8, L40-43)

She added later, "to make it a high priority, we need . . . a sustainability model" (D8, L158-159).

To make transformation successful, the fourth theme is finding the right people. One leader made it clear her role was at the conceptual level. "I'm not too much in the weeds with this. What I figured out is how to do it, how to fund it, but they developed it" (D1, L225-226). Another leader explained her role:

> What deans have done is find the right person and [we were] willing to put the money up . . . . That is a strategy, then, and each of us [is] doing our best with our own faculty to say, "move this forward." (D7, L222-235)

The fifth theme in the leading role category is securing resources. Several leaders wrote major grants to fund new initiatives, while others shifted staffing to free up human resources. "That grant gave us more money and more resources to strengthen and continue our interprofessional education . . . . We got the [other] grant because they loved the interprofessional piece; it was unique and innovative" (D1, L119-129). Yet, another leader noted, "I spend most of my day advocating for resources to support different things; it's not already there" (D8, L516-517).

Category 2: building infrastructure. Building the infrastructure for IPE organizational transformation made the change visible and communicated commitment.

Leader 4, who had no ambivalence herself or among her faculty, was ahead of the curve in IPE in many respects. When she spoke of IPE on her campus, the infrastructure component was a key element in their transformation. Years earlier, the campus had considered writing a national grant for IPE:

> We have so much commitment and enthusiasm . . . . [Yet] it was clear, we didn't
> have the infrastructure to write for that grant. We passed on the grant, but made a
> commitment to do the infrastructure . . . . We developed an encompassing
> structural framework. (D4, L42-53)

They established staff, space, budget, and an executive board.

The first theme in the building infrastructure category is establishing an IPE committee. Most leaders relayed that their campus moved from informal planning to naming an IPE committee. As one leader reflected on the early stages of IPE at her campus, she shared that some faculty had attended a national IPE conference to get ideas. "Then the university decided to support this initiative. We now have an IPE committee that includes faculty from all the [participating] schools" (D5, L41-42).

At another campus, the IPE committee was a cross section of faculty. Sometimes, they encountered barriers. Leader 2 stated:

> We put in place an IPE steering committee. My faculty came to me and said,
> "We'd like to do a few more things, but they don't seem to be a priority. Could we
> get some administrative help to see if we can move forward?" (D2, L612-621)

The IPE committee created ownership among the faculty; some problem solving required a steering committee with the deans on it. On yet another campus, the IPE body is called a team rather than a committee. "The structure was very important . . . they started a

leadership team [with] deans from all the health profession schools that were part of this" (D9, L28-29).

The second theme is naming champions or hiring a director. As Leader 7 pointed out, "This [leading IPE] isn't a dean job. That's why we have hired the director" (D7, L220). One campus had a team of IPE champions who organized a retreat with people in healthcare, then they built a strategic plan. "We used it [the strategic plan] for our job description for the person who we hired to be [IPE] director" (D6, L396-406). A paid position signaled this was a high priority.

The third theme is responsibility for planning and assessment. "There was quite a bit of planning in getting ready for this. I think we had a lot of lead time, prep time, but it was very active" (D5, L53-54). From Leader 9, "We've studied them [students] with the IPAS, Interprofessional Attitudes Scale, to see their changes and their thoughts towards IPE before and after our forums, and the numbers do go up . . . they're actually interested in it" (D9, L156-159). Taking a long view, Leader 8 said, "We have held some successful activities. But I think interprofessional education has more power when it's longitudinal and there's multiple experiences with the same group, so they can build relationships and understand roles and responsibilities" (D8, L55-58).

Category 3: empowering faculty. Several leaders chose to make the initiatives faculty-driven; it was also described by some as faculty-led, bottom-up, or grassroots. The first theme in this category is early adopters. "We found early adopters. I am of the mindset that faculty-driven is a very key piece and not a top-down approach. Top-down gives the structure, but the faculty-driven process will inspire the ideas" (D2, L411-416).

Leader 6 noted they started with a bottom-up approach. "We were able to bring in a few faculty from the various colleges [to create the core team]" (D6, L84-86).

The second theme in the empowering faculty category is curriculum. Leader 2 stated, "It's been a faculty-led initiative . . . empowering those faculty . . . reminding them of the importance of this. They have really driven a lot of the ideas on where to incorporate it in the curriculum" (D2, L329-334). Another leader said,

> Faculty . . . is where all the work gets done; this is education . . . faculty
> governance, that's where that sits. We can say this is important in the bigger
> picture, but they have to be the ones that initiate and implement. (D7, L252-254)

Leader 5 said, "we had activities, and now we're at the first level of integration with IPE in our curriculum" (D5, L67-68).

The third theme is model the way. This was faculty helping students prepare for the real world. The idea that students must model the way is a focus on the future. Leader 9 shared this story from her small group work with students in IPE activities:

> I tell the students . . . "You are the generation that's going to be responsible for
> carrying this through . . . we're depending on you . . . don't be discouraged if you
> find people out there who just don't fully understand it yet; they're just kind of
> old school. You are the new generation of healthcare providers." (D9, L624-634)

Leader 7 spoke of the same expectation of her graduates. "You come out as a new grad and you have a different paradigm. . . you don't have any credibility . . . you just need to keep doing what you're doing . . . that's a modeling thing" (D7, L308-314).

The fourth theme is the tipping point, reaching the critical mass needed to bring about change. Some leaders saw this as a way for ambivalent faculty to get on board.

I will say . . . when there is a faculty-driven piece, a lot of the other faculty will

get on board with that. If people are not on board, we tend to move forward

anyway and hope that they recognize that the majority of people are moving

forward and, "I better get on this bus as well." (D2, L417-421)

Leader 7 noted,

Nursing faculty have been part of the tipping point, because they've been

participating in events and helping get things off the ground [on the campus] . . .

but that tipping point will take some time to see what it is, it's too soon to tell.

(D7, 265-275)

Category 4: boundary spanning. Seven of the leaders utilized the boundary

spanning strategy. Reflecting on her various roles over the years, Leader 1 described

boundary spanning:

I moved throughout the system and spanned boundaries all the time in the interest

of patients. I do that now. I move about in the community. I figure out what the

community needs, what we can do, what other people who I work with might be

able to do that I can't do. Now, it's more for students. (D1, L541-546)

She identified needs and connections, the first theme. In prior days, she was focused on

patients. As an academic leader, she found ways to connect community needs with ways

to help her students learn and serve the community. Leader 3 indicated that "we make

arrangements with other schools, individually, to increase our interprofessional

interaction through simulations and cases to help those students" (D3, L95-99).

The second theme is building relationships. One of the leaders who felt *shoved*

into IPE said finding willing partners for IPE interaction was key. "We build on goodwill

and the opportunities and the relationship building" (D3, L315-316) both on and off the campus. Another spoke about, "meeting with deans from other colleges and universities for IPE activities" (D2, L401-403). Leader 1 shared how she had cultivated relationships with practitioners around the region.

> With our students and residents from area hospitals, we have a summer boot
> camp, hands-on simulation . . . . We set up the scenarios and run them . . . we're
> videotaping them. After the scenario's over, the videos are there for the team to
> look at and critique . . . this is a high-impact learning practice. (D1, L237-247)

The third theme is taking a holistic approach. This involves going outside of the boundaries typically identified in healthcare education. One participant explained that they draw in faculty from law and business when they write up the cases for the campus-wide events. "A lot of times, in the case discussions, it will dawn on the students . . . 'there are legal issues here' . . . or . . . 'let's look at the health insurance issues and the family finances' . . . it's more holistic, looking at the entire patient" (D3, L363-371). Leader 7 shared that they included other disciplines. "We include public health and, even though it isn't a health science, we have adopted social work" (D7, L84-85). Leader 8 spoke of the interprofessional practice aspect. "I put energy into interprofessional practice because . . . it's much more holistic in how they think about interprofessional education and continuing professional development in the learning environment" (D8, L207-209).

The fourth theme is spanning students to practitioners. One leader remarked: "If you start at the grassroots, students will become practitioners, practitioners will be comfortable, and then [they will] implement more IPE in the actual world." (D3, L44-45). Another leader said it might be better to bring IPE to practitioners:

We keep talking about IPE, but it's really interprofessional practice that we want.

We can sit together in a classroom all we want, and that is not going to get us any

farther in how we work with clients and patients. . . . we bring in the leaders of the

healthcare systems and talk about what we're doing, what they're doing. . . . Well,

they love this whole idea. (D7, 290-303)

Boundary spanning provides the chance to cast a net widely across many professions and
to engage students, faculty, and practitioners in IPE.

Category 5: joining maneuvers. Joining maneuvers is used when transitions hit

barriers or get stalled. The first theme is finding common ground, which is problem-

solving around the ultimate goal. One leader said:

I was always trying to figure out how to solve problems and get beyond conflict,

get disparate positions . . . some conflict or hierarchy to come together to solve

problems. I remember . . . a professor . . . talking about joining maneuvers. I

realized the most effective joining maneuver was to make every conversation

about what's best for the patient, who's going to argue with you about that. (D1,

L302-310)

Leader 4, who felt no ambivalence, spoke of work that had been done on her

campus in prior years. Common ground was a key strategy they had used to move IPE

forward. They looked for bridges to work on together to benefit patients.

There are certain things that each of our professions were doing . . . learning a

little bit differently, but if we learn it together, we can learn from each other. An

example would be communicating bad news . . . . Learning together how you talk

about that with a patient. . . . it's in the patient's best interest that we all know how to do it in a way that's going to be helpful. (D4, L296-305)

The second theme is compromise. Sometimes problem solving and moving forward means giving something up. As Leader 2 articulated, "You're talking about giving things up . . . like control of your own schedule . . . taking out pieces of your curriculum . . . . You've got to compromise with somebody who's looking at things from a different viewpoint. It's a work in progress" (D2, L681-692).

Leader 5 expressed similar observations. "I think we just had to have those conversations when [IPE planning] got contentious" (D5, L119). Later in the interview, she noted that having those conversations about planning concerns and priorities, "helped smooth the way [for IPE]" (L197).

This concludes the findings on change strategies used by the leaders who had or saw ambivalence during organizational transformation. The chapter summary is next.

Summary of Results

The purpose of this interpretative phenomenological analysis study was to examine the experiences of academic leaders who were engaged in IPE organizational transformation. The study explored whether they experienced ambivalence, how they responded to ambivalence, and whether they used ambivalence in leading organizational transformation. Six of the nine leaders experienced ambivalence. Two experienced individual ambivalence and responded at the individual level. Ultimately, all six had collective ambivalence and responded collectively. Two additional leaders recognized ambivalence among others on their campus and factored this in when contemplating strategies for organizational transformation. One participant felt no ambivalence

personally, nor did she see ambivalence amongst her faculty. She believed that she and the senior leaders were educators and collaborators, and their partnership made transformation on their campus successful.

This study also sought to identify the strategies used by the participants in leading organizational transformation. A total of 18 themes emerged from the data, which were clustered into five categories. The first category, leading role, includes five themes: (a) helping people see the vision, (b) reframing expectations, (c) making change a high priority, (d) finding the right people, and (e) securing resources. The second category, building infrastructure, includes the three themes of: (a) establishing the IPE committee, (b) naming champions or hiring a director, and (c) planning and assessment. The third category, empowering faculty, includes the four themes of: (a) early adopters, (b) curriculum, (c) model the way, and (d) tipping point. The fourth category, boundary spanning, includes four themes: (a) identifying needs and connections, (b) building relationships, (c) taking a holistic approach, and (d) spanning students to practitioners. The fifth category, joining maneuvers, includes the two themes of: (a) common ground and (b) compromise. These categories and themes provided the framework for how the participating leaders in this study were charting the path for organizational transformation when they had salient ambivalence or knew others were feeling ambivalent.

The final chapter, Chapter 5, looks at the implications of the findings, considers limitations of the study, and provides recommendations for further research.

Chapter 5: Discussion

This chapter summarizes the research conducted on leader responses to ambivalence during IPE organizational transformation, and their subsequent selection of change strategies. The findings from the study are discussed, along with implications for leaders who are engaged in transforming their organizations. The limitations of the study and recommendations are discussed. A conclusion summarizes the chapter.

The purpose of this study was to identify what practices leaders, who felt ambivalent during organizational transformation, used to successfully lead change. Knowledge of these practices can provide leaders with processes that may be used individually and collectively with colleagues and followers when change triggers ambivalence. The study identified how leaders responded to their own ambivalence once it was salient, and the change strategies they used to achieve transformation within their organizations when ambivalence was present.

Communities and nations rely on healthcare education institutions (HEIs) to prepare healthcare professionals to solve increasingly complex healthcare problems (Frenk et al., 2010). Leaders of HEIs are faced with transforming healthcare education and the structures of discipline-specific silos established more than 100 years ago (Cooke et al., 2006) into a collaborative education system (Frenk et al., 2010; Gilbert et al., 2010).

HEI leaders who learned their professional norms and mental models in silos may be challenged in initiating change (Brewer, 2016b; Ho et al., 2008). Changing healthcare

education is not always embraced and may trigger ambivalence in leaders. Understanding HEI leader responses to ambivalence during change can provide insight into successful leadership practices used in facilitating organizational transformation.

This qualitative study answered the following research questions:

1. Do HEI leaders experience ambivalence during organizational transformation?

2. How do leaders respond to salient ambivalence; individually, collectively, or both?

3. Once ambivalence is salient, how do leaders use it to examine change strategies?

Data were collected from interviews with nine participants who, at the time of the interviews, were HEI leaders in nursing, medicine, and pharmacy schools in Central and Western New York. Both public and private campuses were represented. Participation was voluntary. Informed consent forms were collected from each participant. Efforts were made to protect the identities of the participants and their campuses.

Individual, semi-structured interviews were conducted with each HEI leader. The interview questions were based on the research questions and the IPA method of a "conversation with a purpose" (Smith et al., 2012, p. 57). Each interview was iterative; prior interviews informed the next interview and the informal questions asked of the participants. Deans were the targeted population; some participants were associate deans. All participants were responsible for IPE in their respective schools, and they were also responsible for helping establish IPE on their respective campuses.

The interpretative phenomenology analysis method was chosen to elicit the lived experience of each of these leaders. The participants were leading their campuses into a new model for faculty to work across professions in educating healthcare students, and for "students from two or more disciplines to learn with, from and about each other" (Smith & Clouder, 2010, p. 2) during their healthcare degree programs. The participants described their entry into IPE, their successes and challenges, the ambivalence, if any, that they felt or that others expressed, how they responded to the ambivalence, and how they chose to proceed with strategies for change on their campus.

The data collected from the participants were analyzed first by reading through each transcript, then annotating the transcripts for meaning units, then coding the transcripts with in vivo (verbatim) terms from the participants using NVIVO software. A codebook was built from the in vivo terms, including definitions, sample quotes, and memos when different in vivo terms seemed unclear or redundant. Monthly meetings between the researcher and the dissertation committee included reviews of the evolving codebook to establish credibility of the study. Triangulation with a fellow student conducting similar research also informed the codebook that was used in analyzing the data. Saturation was reached on numerous codes identified by the participants.

In Chapter 3, the research method was described in detail, including the process for identifying participants, and the process used in analyzing the data. Chapter 4 provided the results of the research at the case and the phenomenon levels. Replicating this study with a similar context for campuses and for participants, and with the same methodology, would confirm the dependability of the study and the results.

Implication of Findings

The first finding was that six of nine participants experienced ambivalence as they led their organizations through transformation with IPE. This is consistent with the literature. When leaders are engaged in organizational transformation, they may experience ambivalence (Ashforth et al., 2014; Piderit, 2000; Pradies & Pratt, 2010; Rothman et al., 2017).

Ambivalence can occur at an individual and/or a collective level, such as a profession or an organization (Ashforth et al., 2014). The research conducted by Pradies and Pratt (2010) found that ambivalence occurs at three levels. Psychological ambivalence occurs at the individual level when one experiences conflicting thoughts, emotions, or both. Sociological ambivalence occurs when roles, norms, and/or culture conflict. Group ambivalence can occur in the interactions between members of a group or across groups in an organization. Ashforth et al. contended that ambivalence is contagious and can spread from the individual level to the collective level, or vice versa; they hypothesized it resolves at the level where it began.

Two of the six participants experienced ambivalence individually, one with role conflict and one with role fatigue. Based on Pradies and Pratt's (2010) model, both experienced sociological ambivalence, given they experienced conflicts within their roles. These two participants also identified ambivalence occurring collectively across groups on their respective campuses as they worked with others to implement IPE. They responded to their collective ambivalence with discussions with peers and colleagues. Using the Ashforth et al. (2014) model, one could argue that for these two participants, ambivalence occurred at multiple levels and required responses at multiple levels.

Two participants had salient ambivalence at a collective level within their profession when their accrediting body made IPE a required standard, *shoving* them into IPE. They experienced collective ambivalence within their profession and responded to their ambivalence collectively through discussions with peers at national conferences and in and outside of their profession on their respective campuses. Based on the Ashforth et al. (2014) model, their ambivalence was triggered at the collective level and they responded at the collective level. Larson and Tompkins (2005) and Randall and Procter (2008) found imposed change was often an antecedent to ambivalence. One could argue imposed change occurred for these two participants in this study.

For all six cases where participants identified their own ambivalence, resolution occurred at the level where it was triggered, confirming the Ashforth et al. (2014) model. Two began at the individual level, and they responded at the individual level. One realized her experience was not unique to her role, then reached out to peers on other campuses in response to her ambivalence. All six participant leaders experienced ambivalence at the collective level, and they responded to that ambivalence at the collective level. Several felt the pull of their profession *(*the patient focus; it's who we are, it's what we do*)* against the push of barriers working with other professions on their own campuses, confronting silos, and tackling numerous logistical problems.

Three of the nine participant leaders did not express ambivalence. Two said they recognized there were some in their schools who felt ambivalent. One participant said she felt no ambivalence, nor were her faculty ambivalent. This lack of ambivalence may be an illustration of what Greenhalgh et al. (2004) identified as leader readiness and system readiness for organizational change, given the antecedents on that campus .

Piderit (2000) said understanding ambivalence helps leaders anticipate responses and utilize ambivalence. There are several implications for leaders. First, leaders need to understand that ambivalence is a normal response to multiple stimuli. Second, utilizing ambivalence can increase flexibility when contemplating options for organizational change. Leaders who face organizational transformation can capitalize on ambivalence through dialogues that examine the causes of ambivalence, and the pros and cons of the various options generated with their followers (Guarana & Hernandez, 2016).

The second finding was the key triggers of ambivalence for these leaders. While numerous forces were identified, only those named by three or more of the six leaders who identified their own ambivalence were entered in Table 4.1, the triggers of ambivalence. These triggers were sorted into two categories: compelling forces that were catalysts, and repelling forces that were barriers. Lewin's force field analysis process (Burnes, 2004; Lewin, 1951) identified driving and resisting forces, and examined ways to maximize driving forces and minimize resisting forces. See Figure 5.1 which depicts Lewin's Force Field Analysis. See Table 5.1, Forces impacting transformation.

While the participants may not have been mindful of Lewin's (1951) model, they considered the forces impacting their ambivalence and decisions. Some participants struggled with the barriers, yet they all responded to the compelling forces. They responded to accreditation standards, but they also responded to the need for a patient focus, for a just culture, and for teaching students and practitioners IPE skills and values. Cameron and Green (2015) said, when organizational transformation is introduced, "driving forces must outweigh resisting forces if change is to happen" (p. 106). Driving forces outweighed the resisting forces in this study. When leaders have tools to identify

and examine compelling and repelling forces they encounter during organizational

transformation, this can facilitate the process of maximizing driving forces, and/or
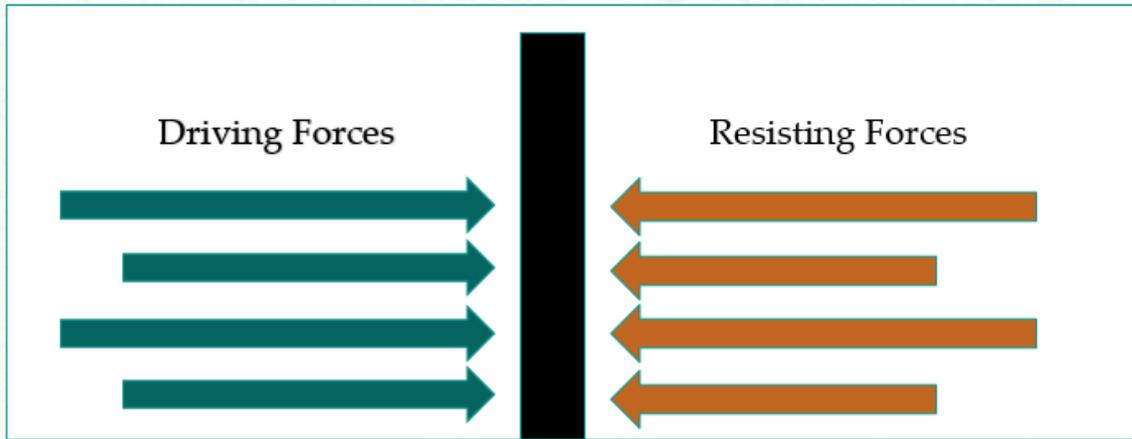
minimize resisting forces.

Figure 5.1. Lewin's Force Field Analysis. Adapted from *Making sense of change management*, 4th ed., 2015, by E. Cameron and M. Green, Philadelphia, PA: Kogan Page.

It is instructive to look again at the forces impacting transformation. In Table 5.1,

forces named by all eight leaders who identified ambivalence, their own or that of others,

are presented.

Table 5.1.

Forces Impacting Transformation (Ambivalence Triggers)

Compelling Catalysts	Repelling Barriers
Accreditation	Logistics – schedules, students, etc.
Patient focus	Resources and costs
Spanning students to practitioners	Silos
Healthcare is a team sport/team work	Hierarchy in healthcare
It's who we are, it's what we do	Curriculum full of mandated content
Just culture	Faculty Workload
Right thing to do	Old school faculty, not all faculty on board

Accreditation, the first catalyst, was named by all the participants. The next three catalysts were named by five participants: patient focus, spans students to practitioners, and healthcare is a team sport/team work. Four participants named the fifth force: it's who we are, it's what we do. Just culture was also named by four leaders. The last catalyst was named by three participants: right thing to do.

The patient focus was named by nursing and medicine leaders—this is not a surprise, given both professions interact heavily with patients. Spanning students to practitioners was named by pharmacy, nursing, and medicine leaders. This is not a surprise; these were all academic leaders focused on students, practitioners, and healthcare education. The team sport/team work catalyst was discussed by pharmacy, nursing, and medicine leaders, all of whom are actively engaged in IPE on their respective campuses to make healthcare a team effort.

The catalyst of it's who we are, it's what we do was named by four pharmacy and nursing leaders. Just culture was named by four participants, three of whom were nursing leaders, and the medicine IPE champion who had experienced a role conflict in her profession. The right thing to do was named by three nursing and pharmacy leaders. It is notable that these three catalysts were identified by nursing and pharmacy leaders with one exception. These three compelling forces illustrate professional norms and mental models. Those forces also run counter to the repelling forces of hierarchy in healthcare and old school faculty, not all faculty are on board. They too illustrate cultural norms and mental models of how professionals perceive each other. Nursing and pharmacy leaders were saying we *are* interprofessional, we seek a just culture, and we all need to engage in IPE to make healthcare better for patients and for all professionals.

Returning to Lewin's (1951) Force Field Analysis, how can transformation occur at the organizational level until these environmental forces are examined overtly by all the professionals, i.e. the individuals, who must change their mental models? How might leaders maximize the forces of just culture and right thing to do, and minimize the forces of the hierarchy in healthcare and old school faculty/not all faculty are on board, both individually and collectively? The existence of unique cultural norms, roles and mental models in each healthcare profession has been well established in the literature (Frenk et al., 2010; Ginsburg & Tregunno, 2005; Ho et al., 2008; Michalec et al., 2013; Oandasan & Reeves, 2005). The call for change in healthcare education includes the need to establish new ways of performing one's role, individually and collectively, within one's profession and within one's organization (Frenk et al., 2010). These new ways of being can trigger ambivalence when roles, goals, identities, and organizational dualities (as a professional and as a member of an organization) conflict. The implications for HEI leaders are considerable. The success of IPE organizational transformation may rest with whether change strategies tackle both the individual identities and mental models, and the organizational dualities and hierarchies experienced by healthcare professionals.

This study looked at the change strategies chosen by the participants and whether ambivalence facilitated flexibility and openness in the transformation. Rothman et al. (2017) found ambivalence can facilitate functional and positive outcomes. Specifically, *cognitive flexibility* can result in an openness to a range of options and to more perspectives. When leaders expressed *emotional ambivalence*, followers became empowered, proactive, and engaged in change. Leaders and organizations benefited from increased creativity. Further, ambivalence can be a bridge between conflict and

adaptation when one is open to new processes and more likely to develop new behaviors in adapting to new situations. Other benefits include mindfulness and cognitive wisdom.

The third finding in this study was the identification of change strategies used by the participants. They were outlined in Table 4.2, which listed the change strategies. The eight participants who recognized their own ambivalence and/or the ambivalence of others pursued organizational transformation through five categories of strategies that helped them shape and influence the transformation they envisioned.

The first category of change strategies is leading role. The leaders in this study articulated that their role encompassed the themes of: (a) helping people see the vision, (b) reframing expectations, (c) making change a high priority, (d) finding the right people, and (e) securing resources. By helping people see the vision and reframing expectations, the participants provided guidelines for change. Making change a high priority, finding the right people, and securing resources did not provide definitive, or linear steps for change. Based on the conclusions drawn by Rothman et al. (2017), the participants, given some of their own ambivalence and the knowledge that others felt ambivalent, left room for creativity, adaptation, and new processes to achieve the vision.

The second category of change strategies is building infrastructure. This encompassed the themes of (a) establishing an IPE committee, (b) naming champions or hiring a director, and (c) responsibility for planning and assessment. The participants made IPE visible with an infrastructure, established who would lead the effort, and they expected accountability for the resources allocated to IPE and for the assessment of outcomes. Each leader and each campus needed to define what infrastructure worked for their environment. There was no clear path; the leaders provided the vision and the

resources for others to build the infrastructure. This is another example of where there was flexibility and room for adaptation, yet it is clear that accountability was factored in with the theme of planning and assessment that was articulated.

The third category of change strategies, empowering faculty, has four themes: (a) early adopters, (b) curriculum, (c) model the way, and (d) tipping point. The participant leaders deliberately chose to empower faculty to drive IPE on most campuses. Based on the findings of Graybeal et al. (2010) and Ho et al. (2008), research on successful IPE transformations have demonstrated that there must be faculty leadership for the curriculum changes to be initiated, tested and adopted. This is also consistent with the work by Brewer (2016a, 2016b) who used the Diffusion of Innovation to help healthcare education examine the innovation of IPE, test it out, and adopt it with faculty at the helm. This strategy demonstrates the leaders' wisdom in engaging the army (Kotter, 2018).

The fourth category of change strategies used by the participants in this study was boundary spanning. This category included (a) identifying needs and connections, (b) building relationships, (c) holistic approaches, and (d) spanning students to practitioners. The participants used these strategies to define healthcare needs, to find new ways to connect with allies, and to build interprofessional learning experiences for healthcare students and practitioners to better serve the community. This demonstrates openness to new options and more perspectives. The participants sought to replace silos with bridges, and they were successful when they established partnerships that had not previously existed, demonstrating adaptation. These strategies are consistent with the functional outcomes that can derive from ambivalence (Rothman et al., 2017).

Conversely, when progress was slow, or efforts to break down silos stalled, the participants used the fifth and final category of change strategies, joining maneuvers. The two themes in this category are (a) common ground, and (b) compromise. Once more citing Rothman et al. (2017), one can see that the participant leaders used ambivalence and creativity to build bridges between conflict and adaptation, demonstrating cognitive flexibility in pursuing new processes and adapting to new situations.

Again, some of the strategies found in this study parallel the key findings in the Ho et al. (2008) and Graybeal et al. (2010) studies of successful IPE transformations. Ho et al. found that IPE champions, changed infrastructures, and funding were the key elements in successful IPE programs. Two of those three were found in this study with the empowering faculty and building infrastructure strategies used by the participant leaders. Graybeal et al. found that support from both administrators and faculty was essential. In this study, the leading role and empowering faculty strategies overlap the Graybeal et al. findings. A paradigm shift or culture change occurred in the organizations where Graybeal et al. found success; that was not yet evident in this study.

When the categories of leading role, building infrastructure, empowering faculty, boundary spanning, and joining maneuvers are combined, there is a strong alignment with Kotter's (2018) 8-steps for accelerating change. With the transition from leading change (Kotter, 1996) to accelerating change (Kotter, 2018), the 8-step model moved from a linear progression to a circular model (Figure 2.1) that encouraged simultaneous use of the steps. The critical phase occurs when leaders create a climate for change with Steps 1-3: (a) create a sense of urgency, (b) build a guiding coalition, and (c) form a vision and strategic initiatives. Once these steps have occurred, leaders can engage the

organization with Steps 4-6: (d) enlist an army of volunteers, (e) enable action by removing barriers, and collectively, the organization must (f) generate short-term wins. To sustain the change, Step 7, (g) sustain acceleration, and Step 8, (h) institute change must occur.

The participant leaders in this study created a sense of urgency by making change a high priority with the push of accreditation, the urgency of patient safety, and the need for a just culture. They built the guiding coalition by creating an IPE committee or team. On some campuses, this also included finding the right people (naming champions or hiring a director). The committees, champions, and/or directors then crafted what Kotter (2018) called the vision and strategic initiatives. These were the elements that created a climate for change. The vision was then communicated to the campus community.

Next, organizations were enabled and engaged by enlisting of an army of volunteers (Kotter, 2018). For the leaders of these higher education institutions, empowering faculty was a deliberate strategy to engage the army who must own and implement the changes in the curriculum. The participants worked to enable action and eliminate barriers (Kotter). This is where boundary spanning and joining maneuvers aligned. Kotter spoke to, "removing barriers such as inefficient processes and archaic norms . . . to work across boundaries . . . . You have tangible evidence of . . . innovations stemming from collapsed silos and new ways of working together" (p. 22).

The deans expected that Kotter's (2018) accelerator, short- and long-term wins, would occur when they named champions or hired a director to lead IPE, and then delegated responsibility for planning and assessment to the IPE champions, committees, and/or staff. Accelerators 7 and 8 are sustaining acceleration and instituting change. A

few of the participants in this study talked about models of sustainability including the resources needed. However, strategies for sustaining acceleration and for solidifying change were not clearly articulated by the participants in this study compared to the other strategies that aligned with Kotter's (2018) model. Kotter might recommend more attention be given to strategies for sustaining and institutionalizing IPE change.

Analyzing the themes found in the category of empowering faculty, one can find alignment with Rogers's (1963) DOI theory. Rogers categorized any population as having innovators, early adopters, an early majority, a late majority, and laggards. In IPE, the innovators are often the ones who become the champions and informal leaders. The participants in this study were looking to engage the innovators and the early adopters among faculty who are connected with their peers and who could carry the message to others. They can model the way and begin the infusion process with students who will model the way once they are practitioners. Rogers found when early adopters opted in and then the early majority participates, the tipping point for change can be reached.

In DOI, one must understand the relative advantages of the innovation to make a decision on whether to adopt it. IPE is the innovation. HEI leaders and faculty alike need consensus on the relative advantages of IPE in order for healthcare providers to change mental models and healthcare hierarchies. Other DOI elements to consider are the complexities and risks associated with the adoption of IPE. These can trigger ambivalence. Implementation can be complex, given the number of leaders who mentioned the logistics of curricula, schedules, and differences across students and programs. Some of the participants saw risks in giving up their identity or the power in the hierarchy. With DOI, implementation is *trying out* the innovation, *confirmation* is

adoption of the innovation. With the empowering faculty strategy, the leaders in this study provided the opportunity for faculty to explore relative advantages, risks, and complexities. This provides space for faculty who felt ambivalent to experiment with various options with their peers while examining the risks and implementation scenarios that may occur during an organizational transformation.

The leader who expressed no ambivalence, personally or among her faculty, may have illustrated system readiness, found by Greenhalgh et al. (2004) in their systematic review of research on DOI. They found some organizations successfully adopted innovations, and concluded success was based on both the leader's and the organization's readiness for change. Crow (2006) echoed this finding and noted that not only must the leader be ready, but he or she must also understand the impact of change on employees and the emotions that change can trigger. Crow argued that all employees must understand the evidence and the vision of the future in order to adopt the innovation. Given that campus had a legacy of faculty who studied and taught interprofessional collaboration, one could argue there was leader and organizational readiness.

Using the DOI framework, particularly the element of relative advantage, it is important to return to the compelling forces identified by participants in this study. Six of nine participants named patient focus as a catalyst—nursing and medicine leaders alike. Patients are the focus of healthcare, and this force is clearly a relative advantage of IPE. The nursing and pharmacy leaders identified their belief in it's who we are, a just culture, and the right thing to do as relative advantages of IPE as well. These forces are, in some respects, an appeal to the participants in medicine not for buy-in, but for a commitment to the transformation IPE brings to healthcare education and practices.

The participating leaders created the parameters that guided transformation and chose change strategies that allowed for creativity and exploration. The strategies were consistent with two theories for organizational change, namely Kotter's 8 accelerators change model (2018), and the diffusion of innovations (Rogers, 2003). When the participants created parameters with their vision and expectations, built an infrastructure, empowered faculty, and used boundary spanning and joining maneuvers, these leaders and their organizations had the opportunity to capitalize on ambivalence, creativity, flexibility, and adaptation during IPE organizational transformation.

Campbell (2008) was cognizant that change is both situational and psychological, that both organizations and individuals are impacted by change. He opined that to ignore one or the other may doom the transformation process. What is missing in the phenomenology findings in this study is an articulation by the leaders stating their awareness of the psychological aspect of change on individuals. Campbell addressed situational and psychological aspects when he examined change management in healthcare when the innovation of electronic health records was about to be implemented. He combined Kotter's (1996) 8-step model with Bridges's (2003) transitions model, which covered the three stages that people experience during change, namely, *endings, neutral zone*, and *beginnings.* Campbell believed one must lead change focused not only on the organization but also on the individuals.

Returning to the compelling and repelling forces named by nursing and pharmacy leaders, there were indications that mental models of one's own profession and the perceptions of other professions may impede or slow IPE organizational transformation. Leaders need to maximize the forces of just culture and right thing to do, and minimize

the forces of the hierarchy in healthcare and old school faculty/not all faculty are on board both individually and collectively. However, none of the change strategies identified by the leaders in this study spoke to themes targeted at helping individuals transition or transform; they were largely targeted at the organization. Leaders spoke of a just culture as an appeal for all professionals to be treated with respect. When leaders say "there is no top dog in this" (D7, L123) or describe healthcare like "a chess board . . . [and] the king is physicians" (D6, L237-247), they are pointing to the hierarchy in healthcare. When leaders say physicians "bear the burden of responsibility" (D9, L651), there is an emotional connection to that mental model. The challenges faced by HEI leaders in initiating change exist at multiple levels (Ginsburg and Tregunno, 2005; Ho et al., 2008), and must be addressed from individual to professional to organization levels. Using the Bridges (2003) transitions model with endings, neutral zone, and beginnings, leaders can focus on helping individuals transform their mental models in order to transform healthcare professions, organizations, and macro-structural barriers.

The focus of this study was on leader responses to ambivalence during IPE organizational transformation. Campbell's (2008) model used both situational and psychological dimensions in his study of change, recognizing that organizations change by changing individuals. This study found little evidence that leaders attended to the psychological aspects of change in their respective schools for themselves or for others. Nor did the change strategies chosen at the phenomenon level address the psychological aspects of change for the members of their organizations. Given the healthcare system of silos and hierarchies has been in place for more than 100 years, along with the unique mental models of each profession, this is a concern for successful IPE transformations.

Limitations

A total of five campuses, both private and public, are represented in this sample. A larger number of campuses might yield different outcomes. Further, only three healthcare professions are represented in this study. Adding more professions may yield different results.

While both men and women were invited to participate, all nine participants were female. This may have skewed the results. Would men express salient ambivalence? Would they respond individually, collectively, or both? Would men use the same strategies for change? Further research with a larger sample, including males, is needed.

Recommendations

This study examined whether leaders experienced ambivalence during IPE organizational transformation, and if so, whether they responded individually, collectively, or both. Further, the study investigated the change strategies chosen by these participants when ambivalence was present. This section on recommendations proposes further studies regarding ambivalence, leadership, and organizational transformation.

The first recommendation is that the study be repeated with more health professions, and with male leaders. All nine participants in this study were female. Would male leaders identify the same triggers for ambivalence, the same responses, or the same change strategies? Further, would other professions identify the same or different forces that trigger ambivalence, or the same or different change strategies?

The triggers of ambivalence, part of the model by Ashforth et al. (2014), became an important part of the study due to the compelling and repelling influences these forces had on the participants. Triggers named by three or more participants sorted into the two

ends of a continuum: forces that were catalysts for change and forces that were barriers to change. In analyzing the participant responses to ambivalence during organizational transformation, the forces that compelled or repelled them had the most impact on the leaders' decisions on transformation strategies. Conducting a force field analysis study on this aspect of the phenomenon would provide further insight into how leaders identify triggers, or forces, how they examine them, and how this impacts their selection of strategies for promoting organizational transformation. Conducting the force field analysis with individuals, then aggregating it and sharing it back would allow leaders to work with the results of the study on the next steps for maximizing compelling forces, minimizing repelling forces, and then selecting change strategies.

The prevalence of ambivalence in this study on IPE organizational transformation is notable, where six of nine participants expressed salient ambivalence. Given this level of ambivalence in this population, it is important to follow up with a study that zeroes in on the presence of ambivalence, and also examines how leaders can help individuals in their organizations through the psychological aspects of change identified by Bridges (2003) in his Transitions model. It is recommended that a case study approach with a campus occur, where the triggers are identified, then examined, and a model for transformation be designed that includes both the psychological and organizational elements using the models from Bridges (2003) and Kotter (2018).

In some interviews, the participants shared that they had discussed their ambivalence with colleagues but did not always leverage their ambivalence to brainstorm or examine options when faced with problems or challenges. Based on the research of Pradies and Pratt (2014) and Rothman et al. (2017), this may be a missed opportunity to

creatively explore new ideas or strategies. Further investigation into deliberately using ambivalence in problem solving may assist leaders in resolving complex challenges.

In the analysis of how the participants responded to their ambivalence, two were forced to engage in IPE due to accreditation requirements. It would be instructional to examine the choices made in leading change with HEI leaders who were forced to lead change and those who voluntarily led change. The participants referenced those dynamics, but that data were not deliberately collected or analyzed with the research questions used in this study. Lewin's force field analysis would be useful for comparing driving and resisting forces with imposed change versus voluntary change.

Additional research into the phenomenon of leader responses to organizational transformation should be conducted with bifocal vision, focusing on both situational change in the organization and psychological change for the individuals. Research has established that healthcare professionals and leaders, alike, have learned their professions within silos, and they have established mental models (Brewer, 2016b; Ginsburg & Tregunno, 2005; Ho et al., 2008). Organizational transformations can be challenging, triggering not just ambivalence but a sense of loss and displacement (Bridges, 2003). Attending to the psychological aspects of change that individuals experience with changing healthcare professionals' behaviors and practices bears further study. The Bridges model provides a foundation for helping leaders understand the psychological transitions of endings, neutral zones for the transition, and beginnings of a new paradigm in healthcare for better patient outcomes and a just culture for all healthcare professions.

This study identified some areas that provide direction for policy development. As the various accrediting bodies add IPE to their standards, it is clear that establishing IPE

takes time, and must engage a large number of constituents in the organizational transformation. However, each leader and each campus spent a significant amount of time trying to create the strategies and models for change that will move the campus forward. National accrediting bodies could create a repository of models for leaders to reference when initiating IPE organizational transformation. The repository would also include research at the national and international level, and resources for team building that can assist organizations as they move from silos to integrated structures.

Finally, recommendations for improved practice include helping leaders and faculty understand that ambivalence is a normal response to change. Once aware of ambivalence, it can help leaders examine the forces that triggered the ambivalence, then become mindful in a) engaging others in identifying best options for action, b) improving communication so all parties are clear about the need for change, and c) examining progress and continuous improvement efforts. Organizations change by changing individuals.

Conclusion

Executive leaders of higher education institutions who confer healthcare degrees are engaging in organizational transformations to meet the evolving needs of tomorrow's healthcare professionals. This change process can trigger ambivalence at individual and collective levels. Research has shown that ambivalence, a push/pull reaction, may play a functional role during decision making in the face of change (Ashforth et al., 2014; Rothman et al., 2017).

The purpose of this research was to examine what practices leaders who felt ambivalent during organizational transformation used to successfully lead change. The

theoretical model by Ashforth et al. (2014) on ambivalence in organizations, a multilevel approach, guided the design of the research questions. The findings add to the literature on leadership, ambivalence, and organizational transformation, particularly in higher education and healthcare.

The research design was qualitative, using the interpretative phenomenological analysis method. The study examined whether HEI leaders engaged in organizational transformation experienced salient ambivalence, how they responded to ambivalence, and what change strategies they chose when ambivalence was present within the leaders and/or their followers. This study answered the following research questions:

1. Do HEI leaders experience ambivalence during organizational transformation?

2. How do HEI leaders respond to salient ambivalence; individually, collectively, or both?

3. Once ambivalence is salient, how do HEI leaders use it to examine change strategies?

Individual, semi-structured interviews were used as the method of data collection. The analysis of the data on ambivalence was informed and guided by the Ashforth et al. (2014) model on ambivalence. The analysis of data on the responses to ambivalence was informed by Lewin's (1951) force field analysis theory. Analysis of the data on change strategies selected by the leaders was guided by Kotter's (2018) 8-accelerators model for change and by the diffusion of innovations theory by Rogers (2003).

The research was conducted in Central and Western New York with leaders of nursing, pharmacology, and medicine schools on campuses that conferred two or more

healthcare degrees from separate schools, each led by a dean. A total of nine participants were interviewed. Interviews were conducted at the office of each leader; the interviews were audio recorded and transcribed. Analysis of each transcript occurred on a case-by-case basis. Next, themes across the cases were determined. Finally, the data for each research question were analyzed across the phenomenon.

Six of the nine participants expressed their own ambivalence during the IPE organizational transformation occurring in their school and/or campus. Two additional participants indicated that they had no ambivalence but were aware that others felt ambivalent about the transformation occurring with IPE. One participant said that she felt no ambivalence, nor did her faculty.

The participants who expressed ambivalence discussed the factors that had contributed to their ambivalence. A pattern emerged, and three categories of forces became apparent. Compelling forces were catalysts for change, repelling forces were barriers to change, and some forces appeared in only one leader's account and were set aside. The participants who expressed ambivalence were motivated by the compelling forces to lead transformation in their organizations, and they enabled others to participate in the transformation. They were challenged by the barriers, but found strategies that helped them and their followers to experiment and find solutions to the barriers.

These leaders believed the purposes for the change were more compelling than the barriers to the change. Leaders and organizations can benefit from ambivalence once it is salient, when leaders experience cognitive flexibility, and when they allow for creativity and adaptation in the change process. In the case of IPE and transformation, these leaders defined the advantages in terms of better patient outcomes, a change in

healthcare beginning with students and spanning to professionals in the field, and a just culture in healthcare. All nine participants indicated change was occurring due to accreditation requirements, yet the vision used by the participants with their schools and campuses focused on the benefits for patients and for all healthcare professionals.

Research in organizational change demonstrates that ambivalence can have positive and functional outcomes (Ashforth et al., 2014; Pradies & Pratt, 2010; Rothman et al., 2017). This study found that leaders who experienced ambivalence used five categories of change strategies to facilitate organizational transformation. The first category, the leading role, encompassed five themes: (a) helping people see the vision, (b) reframing expectations, (c) making it a high priority, (d) finding the right people, and (e) securing resources. The second category, building infrastructure, included (a) establishing an IPE committee, (b) naming champions or hiring a director, and (c) planning and assessment of the work.

The third category, empowering faculty, was used by the participants to engage their faculty in the transformation. It contained the themes of (a) early adopters, (b) curriculum, (c) model the way, and (d) the tipping point. The fourth category, boundary spanning, contained the themes of (a) identifying needs and connections, (b) building relationships, (c) using a holistic approach, and (d) spanning students to practitioners. The fifth and final category, joining maneuvers, encompassed the themes of (a) finding common ground, and (b) compromise.

These five strategies and their companion themes provided guidance as the leaders engaged the participants who needed to examine, experiment with, and implement the changes. With the infrastructure created, and with the army of faculty who

became innovators and early adopters, these leaders allowed for adaptation, creativity, collaboration, and faculty leadership to emerge in the transformation. The strategies aligned with Kotter's 8 accelerators for change, based on a model that has been used for leading change for more than 20 years (Kotter, 2018).

However, healthcare students, professionals, and leaders carry mental models that have evolved over 100 years (Frenk et al., 2010). The changes needed to establish interprofessional education and interprofessional practice require that individuals change, not just organizations. Healthcare providers who learned their professions in silos have mental models and cultural norms within their professions (Frenk et al., 2010; Ginsburg & Tregunno, 2005). Michalec et al. (2013) studied healthcare students and found they enter their respective programs with mental models. HEI leaders may be challenged in initiating change (Brewer, 2016b; Ho et al., 2008) when these mental models are so deeply embedded in the professions.

Additional research into the phenomenon of leader responses to ambivalence during organizational transformation should be conducted with a dual focus on both the psychological aspects of change for individuals and the situational context of the healthcare organization. Change can be challenging, triggering not just ambivalence but a sense of loss and displacement (Bridges, 2003). Campbell (2008) believed that leaders need to attend to both psychological and situational aspects of change in order to select the appropriate strategies to change organizations comprised of individuals.

Combining the Ashforth et al. (2014) model on ambivalence with force field analysis (Cameron & Green, 2015) would be a unique way to identify, examine, and maximize driving forces. This process would need to engage the leaders in healthcare

education organizations across all the healthcare professions in a collective process. Given the dimensions of hierarchy and mental models, the psychological aspects of change in Bridges and Bridges (2016) transitions model of endings, neutral zones, and beginnings could be included to establish new mental models and new paradigms in healthcare for improved patient outcomes and a just culture across all healthcare professions.

Organizational transformation is an intentional, systemic break from an organization's past to enable the organization to develop in new directions (Lee et al., 2012). Leaders who are ambivalent about change are more cognitively flexible and open to new processes and adaptations (Rothman et al., 2017) as they lead their organizations and members through organizational transformations. The results of this study found that leaders with salient ambivalence engaged in change strategies that demonstrated flexibility and creativity, and that built bridges between conflict and adaptation in the pursuit of IPE organizational transformation. However, there were indications that not all healthcare professionals were on board with the IPE transformations.

The literature suggests that successful transformations include psychological transitions (Bridges and Bridges, 2016; Campbell, 2008) as well as situational and organizational contexts in institutionalizing changes (Kotter, 2018). Psychological elements were missing in the change strategies identified in this study. Utilizing Kotter's (2018) complete model for accelerating change combined with Bridges and Bridges (2016) transitions model can provide leaders with comprehensive strategies for successful IPE organizational transformations.

References

Abu-Rish, E., Kim, S., Choe, L., Varpio, L., Malik, E., White, A., . . . Zierler, B. (2012). Current trends in interprofessional education of health science students: A literature review. *Journal of Interprofessional Care, 26*(6), 444-451.

Anderson, E.S., Thorpe, L.N. (2014). Students improve patient care and prepare for professional practice: An interprofessional community-based study. *Medical Teacher*, 36, 495-504.

Armenakis, A. A., Harris, S. G., Cole, M. S., Fillmer, J. L., & Self, D. R. (2007). A top management team's reactions to organizational transformation: The diagnostic benefits of five key change sentiments. *Journal of Change Management, 7*(3-4), 273-290.

Ashforth, B. E., Rogers, K. M., Pratt, M. G., & Pradies, C. (2014). Ambivalence in organizations: A multilevel approach. *Organization Science, 25*(5), 1453-1478.

Barr, H., Koppel, I., Reeves, S., Hammick, M., & Freeth, D. (2005). *Effective interpersonal education: Argument, assumption and evidence*. Oxford, England: Blackwell Publishing Ltd.

Benner, P. (Ed.). (1994). *Interpretive phenomenology: Embodiment, caring, and ethics in health and illness*. Thousand Oaks, CA: Sage Publications.

Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: Care, health and cost. *Health Affairs*, *27*(3), 759-769. doi:10.1377/hlthaff.27.3.759

Blue, A. V., Chesluk, B. J., Conforti, L. N., & Holmboe, E. S. (2015). Assessment and evaluation in interprofessional education. *Journal of Allied Health, 44*(2), 73-82.

Bolman, L. G., & Deal, T. E. (2013). *Reframing organizations: Artistry, choice, & leadership* (5th ed.). San Francisco, CA: Jossey-Bass.

Brandt, B., Lutfiyya, M. N., King, J. A., & Chioreso, C. (2014). A scoping review of interprofessional collaborative practice and education using the lens of the Triple Aim. *Journal of Interprofessional Care, 28*(5), 393-399.

Brewer, M. (2016a). Exploring the potential of a capability framework as a vision and "sensemaking" tool for leaders of interprofessional education. *Journal of Interprofessional Care, 30*(5), 574-581.

Brewer, M. (2016b). Facilitating the dissemination of interprofessional education and practice using an innovative conference approach to engage stakeholders. *Journal of Interprofessional Education and Practice, 2*(March), 33-38.

Brewer, M., Flavell, H. L., Trede, F., & Smith, M. (2016). A scoping review to understand "leadership" in interprofessional education and practice. *Journal of Interprofessional Care, 30*(4), 408-415.

Bridges, W. (2003). *Managing Transitions.* (2nd ed.) Cambridge, MA: Da Capo Press.

Bridges, W. & Bridges, S. (2016). *Managing Transitions.* (4th ed.) Philadelphia, PA: Da Capo Press.

Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Burden, M. (2016). Using a change model to reduce the risk of surgical site infection. *British Journal of Nursing, 25*(17), 949-955.

Burnes, B. (2004). Kurt Lewin and the planned approach to change: A re-appraisal. *Journal of Management Studies, 41*(6), 977-1002.

Campbell, R. J. (2008). Change management and health care. *The Health Care Manager, 27*(1), 23-39.

Cameron, E., & Green, M. (2015). *Making sense of change management: A complete guide to the models, tools and techniques of organizational change* (4th ed.). Philadelphia, PA: Kogan Page.

Cohen, M. F. (2016). Impact of the HITECH financial incentives on EHR adoption in small, physician-owned practices. *International Journal of Medical Informatics, 94*(October), 143-154.

Crow, G. (2006). Diffusion of innovation: The leaders' role in creating the organizational context for evidence-based practice. *Nursing Administration Quarterly, 30*(3), 236-242.

Dematteo, D., & Reeves, S. (2011). A critical examination of the role of appreciative inquiry within an interprofessional education initiative. *Journal of Interprofessional Care, 25*(3), 203-208.

Farnsworth, T., Peterson, T., Neill, K., Neill, M., Seikel, J.A., & Lawson, J. (2015). Understanding the structural, human resource, political, and symbolic dimensions of implementing and sustaining interprofessional education. *Journal of Allied Health, 44*(3), 152-157.

Flexner, A. (1910). *Medical education in the United States and Canada: A report to the Carnegie Foundation for the advancement of teaching.* Boston, MA: The

Merrymount Press. Retrieved from
http://archive.carnegiefoundation.org/pdfs/elibrary/Carnegie_Flexner_Report.pdf

Flick, U. (2014). *An introduction to qualitative research*. (5th ed.). Los Angelos, CA:
Sage.

Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., . . . Zurack, H. (2010).
Health professionals for a new century: Transforming education to strengthen health
systems in an interdependent world. *Lancet, 376*(9756), 1923-1958.

Gentles, S. J., Charles, C., Ploeg, J., & McKibbon, K. A. (2015). Sampling in qualitative
research: Insights from an overview of the methods literature. *The Qualitative Report,
20*(11), 1772-1789.

Gilbert, J. H., Yan, J., & Hoffman, S. J. (2010). Framework for action on
interprofessional education and collaborative practice. *Journal of Allied Health*,
39(3), 196-197.

Ginsburg, L., & Tregunno, D. (2005). New approaches to interprofessional education and
collaborative practice: Lessons from the organizational change literature. *Journal of
Interprofessional Care, 19*(Supplement 1), 177-187.

Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change
initiation. *Strategic Management Journal, 12*(6), 433-448.

Goodman, J. C., Villarreal, P., & Jones, B. (2011). The social cost of adverse medical
events, and what we can do about it. *Health Affairs, 30*(4), 590-595.

Graybeal, C., Long, R., Scalise-Smith, D., & Zeibig, E. (2010). The art and science of
interprofessional education. *Journal of Allied Health, 39*(3), 232-237.

Greenhalgh, T., Robert, G., MacFarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion
of innovations in service organizations: Systematic review and recommendations. *The
Milbank Quarterly, 82*(4), 581-629.

Guarana, C. L., & Hernandez, M. (2016). Identified ambivalence: When cognitive
conflicts can help individuals overcome cognitive traps. *Journal of Applied
Psychology, 101*(7), 1013-1029.

Hammick, M, Freeth, D., Koppel, I., Reeves, S., & Barr, H. (2007). A best evidence
systematic review of interprofessional education: BEME guide no. 9. *Medical
Teacher, 29*(8), 735-751.

Ho, K., Jarvis-Selinger, S., Borduas, F., Frank, B., Hall, P., Handfield-Jones, R., . . .
Rouleau, M. (2008). Making interprofessional education work: The strategic roles of
the academy. *Academic Medicine, 83*(10), 934-940.

Horder, J. (2003). *A history of the centre for the advancement of interprofessional education (CAIPE), 1987-2003.* [PDF document]. Retrieved from https://www.caipe.org/resources/publications/archived-publications/history-centre-advancement-interprofessional-education-caipe-1987-2003-john-horder-first-chairman

Kirkpatrick, D. L. (1959). Techniques for evaluating training programs. *Journal of American Society of Training Directors, 13*(3), 21-26.

Kotter, J. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review*, March-April, Reprint 95204. Retrieved from https://eoeleadership.hee.nhs.uk/sites/default/files/leading_change_why_transformation_efforts_fail.pdf

Kotter, J. (1996). *Leading change*. Watertown, MA: Harvard Business Review Press.

Kotter, J. (2018). *8 Steps to accelerate change in your organization.* Retrieved from https://www.kotterinc.com/wp-content/uploads/2018/05/8-Steps-eBook-Kotter-2018.pdf

Laiteerapong, N., & Huang, E. S. (2015). The pace of change in medical practice and health policy: Collision or coexistence? *Journal of General Internal Medicine, 30*(6), 848-852.

Larson, G. S., & Tompkins, P. K. (2005). Ambivalence and resistance: A study of management in a concertive control system. *Communication Monographs, 72*(1), 1-21.

Lawlis, T. R., Anson, J., & Greenfield, D. (2014). Barriers and enablers that influence sustainable interprofessional education: A literature review. *Journal of Interprofessional Care, 28*(4), 305-310.

Lee, S. D., Weiner, B. J., Harrison, M. I., & Belden, C. M. (2012). Organizational transformation: A systematic review of empirical research in health care and other industries. *Medical Care Research and Review, 70*(2), 115-142.

Lewin, K. (1947). Group decision and social change. In T. M. Neweome & E. L. Hartley (Eds.) *Readings in social psychology* (pp. 340-344). New York NY: Henry Holt and Co.

Lewin, K. (1951). *Field theory in social science; selected theoretical papers*. D. Cartwright (Ed.). New York: Harper & Row.

Long, S., Schwartz, B. W., Conner-Kerr, T., Cada, E. A., & Hogan, R. (2014). Priorities, strategies, and accountability measures in interprofessional education. *Journal of Allied Health, 43*(3), e37-e44.

Lopez, K. A., & Willis, D. G. (2004). Descriptive versus interpretive phenomenology: Their contributions to nursing knowledge. *Qualitative Health Research, 14*(5), 726-735.

Michalec, B., Giorano, C., Arenson, C., Antony, R., & Rose, M. (2013). Dissecting first-year students' perceptions of health profession groups. *Journal of Allied Health, 42*(4), 202-213.

Oandasan, I., & Reeves, S. (2005). Key elements of interprofessional education. Part 2: Factors, processes and outcomes. *Journal of Interprofessional Care, 19*(Supplement 1), 39-48.

Olenick, M., & Allen, L. R. (2013). Faculty intent to engage in interprofessional education. *Journal of Multidisciplinary Healthcare, 11*(6), 149-161.

Oreg, S., & Sverdlik, N. (2011). Ambivalence toward imposed change: The conflict between dispositional resistance to change and the orientation toward the change agent. *Journal of Applied Psychology, 96*(2), 237-349.

Piderit, S. K. (1999). *Navigating relationships with coworkers: Understanding employees' attitudes toward an organizational change* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 9929921)

Piderit, S. K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management Review, 25*(4), 783-794.

Plambeck, N., & Weber, K. (2009). CEO ambivalence and responses to strategic issues. *Organization Science, 20*(6), 993-1010.

Porter-O'Grady, T. P., & Malloch, K. (2015). *Quantum leadership: A resource for health-care innovation* (4th ed.). Boston, MA: Jones and Bartlett.

Pradies, C., & Pratt, M. G. (2010, August 1). *Ex uno plures: Toward a conceptualization of group ambivalence*. Paper presented at the 2010 meeting of the Academy of Management, Montreal, CA. doi:10.5465/AMBPP.2010.54493648

Pyett, P. M. (2003). Validation of qualitative research in the "Real World." *Qualitative Health Research, 13*(8), 1170-1179.

Randall, J., & Procter, S. (2008). Ambiguity and ambivalence: Senior managers' accounts of organizational change in a restructured government department. *Journal of Organizational Change, 21*(6), 686-700.

Reeves, S., Fletcher, S., Barr, H., Birch, I., Boet, S., Davies, N., . . . Kitto, S. (2016). A BEME systematic review of the effects of interprofessional education: BEME guide no. 39. *Medical Teacher, 38*(7), 656-668.

Reeves, S., Perrier, L., Goldman, J., Freeth, D., & Zwarenstein, M. (2013). Interprofessional education: Effects on professional practice and healthcare outcomes (update) (Review). *The Cochrane Database of Systematic Reviews, 3*. doi:10.1002/14651858.CD002213.pub3

Reeves, S., Zwarenstein, M., Goldman, J., Barr, H., Freeth, D., Hammick, M., & Koppel, I. (2008). Interprofessional education: Effects on professional practice and health care outcomes. *The Cochrane Database of Systematic Reviews, 1*. doi:10.1002/14651858.CD002213.pub2.

Rogers, E. M. (1962). *Diffusion of innovations*. New York, NY: Free Press of Glencoe.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.) New York NY: Free Press.

Rothman, N. B., Pratt, M. G., Rees, L. & Vogus, T. J. (2017). Understanding the dual nature of ambivalence: Why and when ambivalence leads to good and bad outcomes. *Academy of Management Journals*, *11*(1), 33-72.

Smith, J. A., Flowers, P., & Larkin, M. (2012). *Interpretative phenomenological analysis, theory, method and research*. Thousand Oaks, CA: Sage Publications.

Smith, S., & Clouder, L. (2010). Interprofessional and interdisciplinary learning: An exploration of similarities and differences. In A. Bromage, L. Clouder, J. Thistlethwaite, & F. Gordon (Eds.), *Interprofessional e-learning and collaborative work* (pp. 1-13). Hershey, PA: Information Science Reference.

Titzer, J. L., Swenty, C. F., & Wilson, G. M. (2015). Interprofessional education: Lessons learned from conducting an electronic health record assignment. *Journal of Interprofessional Care, 29*(6), 536-540.

van Manen, M. (2007). Phenomenology of practice. *Phenomenology & Practice, 1*(1), 11-30.

Williams, K. (2014). *Evaluating successful disease management programs using Kotter's eight-step change model as a theoretical framework for understanding* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3648365)

Appendix A

St. John Fisher IRB Approval

ST. JOHN
FISHER
COLLEGE

February 8, 2018

File No: 3831-011818-08

Pamela Youngs-Maher
St. John Fisher College

Dear Ms. Youngs-Maher:

Thank you for submitting your research proposal to the Institutional Review Board.

I am pleased to inform you that the Board has approved your Expedited Review project, "Leader Response to Ambivalence During IPE Organizational Transformation."

Following federal guidelines, research related records should be maintained in a secure area for three years following the completion of the project at which time they may be destroyed.

Should you have any questions about this process or your responsibilities, please contact me at irb@sjfc.edu.

Sincerely,

Eileen Lynd-Balta

Eileen Lynd-Balta, Ph.D.
Chair, Institutional Review Board

ELB: jdr

Informed Consent Form

Title of study: Leader Response to Ambivalence During IPE Organizational
         Transformation: A Phenomenological Study

Name of researcher: Pamela Youngs-Maher   **Phone number**: 315-529-0511

Faculty Supervisor: Dr. Theresa Pulos   **Phone number**: 585-203-4349

Purpose of study:
The purpose of this study is to examine how Healthcare Educational Institution (HEI)
leaders facilitate IPE organizational transformation, and to identify practices employed
by leaders to examine strategies used to lead change when ambivalence is recognized.

Place of study: Colleges in Central & Western NY

Length of participation: 75 – 90 minutes. There may be need for follow-up questions.

Method(s) of data collection: Semi-structured, in-person interviews

Risks and benefits: There are no expected risks associated with participation in this
study. The benefits will extend to leaders of organizations who are engaged in
organizational transformation when they, or their peers and/or followers experience
ambivalence. The findings of this study may help leaders as they examine different ways
to lead organizations to new visions or new structures when members of the organization
experience ambivalence regarding the transition.

Method for protecting confidentiality/privacy of subjects: Audio Files will be kept in
a password protected computer at the researcher's home. Transcribed interviews will use
an alpha-numeric code with letter of the month that the interview occurred, and the
sequence of interviews, rather than names of participants. The master list of which code
maps to which participant will be kept in the password protected computer, and in a
locked file cabinet, separate from the locked files housing transcripts.

Your information may be shared with appropriate governmental authorities ONLY if you
or someone else is in danger, or if we are required to do so by law.

Method for protecting confidentiality/privacy of data collected: Data, and references to data from participants will not use name or institution, but will only refer to gender collectively, and role (Dean or Chair). The researcher plans to recruit at least two members of each discipline to provide the opportunity to reference to discipline specific responses, but not name or college.

Your rights: As a research participant, you have the right to:
1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at any time without penalty.
3. Refuse to answer a particular question without penalty.
4. Be informed of the results of the study.

I have read the above, received a copy of this form, and I agree to participate in the above-named study.

_____   _____
Print name (Participant)   Signature   Date

_____   _____
Print name (Investigator)   Signature   Date

If you have any further questions regarding this study, please contact the researcher(s) listed above. If you experience emotional or physical discomfort due to participation in this study, please contact your personal healthcare provider or an appropriate crisis service provider. In Central New York, Southern tier, and Western New York, please call 2-1-1 for assistance in identifying a crisis service provider in your area.

The Institutional Review Board of St. John Fisher College has reviewed this project. For any concerns regarding this study/or if you feel that your rights as a participant (or the rights of another participant) have been violated or caused you undue distress, please contact Jill Rathbun by phone during normal business hours at (585) 385-8012 or irb@sjfc.edu. She will contact a supervisory IRB official to assist you.

All digital audio recordings and transcriptions of interviews will be maintained using a private, locked, and password-protected file and password-protected computer stored securely in the private home of the principal researcher. Electronic files will include assigned identity codes; they will not include actual names or any information that could personally identify or connect participants to this study. Other materials, including notes or paper files related to data collection and analysis, will be stored securely in unmarked boxes, locked inside a cabinet in the private home of the principal researcher. Only the researcher will have access to electronic or paper records. The digitally recorded audio data will be kept by this researcher for a period of 5 years following publication of the dissertation. Signed informed consent documents will be kept for 5 years after publication. All paper records will be cross-cut shredded and professionally delivered for

incineration. Electronic records will be cleared, purged, and destroyed from the hard drive and all devices such that restoring data is not possible.

Appendix C

Questions Used for the Semi-Structured Interviews

1. How would you label your profession with a word or two?

2. How would you describe your profession in an elevator speech?

Thank you. The next several questions focus on IPE here at your college.

3. When did your campus initiate IPE?

4. Is IPE a high priority here?

5. What successes has your college had in implementing IPE in healthcare education?

   a. Ask for 1-2 examples with faculty and with students.

6. What challenges or conflicts has your college had in implementing IPE?

Now we're going to focus on your role as a leader.

7. Tell me about any mixed feelings/conflicting thoughts you have had in leading IPE?

   a. Who have you discussed these challenges/feelings with?

8. Have your colleagues had mixed feelings/experiences with IPE?

   a. How do you work through the ambivalence that others experience?

9. How do/did you choose your strategies for leading IPE and change here?

Thank you. Now let's focus on your profession, leadership role, and IPE.

10. It seems like IPE asks you to let go of familiar aspects of your profession—terminology, perceptions, roles—as you lead IPE and move toward a new way of educating and thinking interprofessionally and as teams. How do you think IPE will change you, your profession, and your college?

11. Do you think IPE is changing healthcare education and healthcare?

12. Are there colleagues here or at other campuses that you would suggest I interview?