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FACULTY PERCEPTIONS AND TEACHING PRACTICES FOR TRANSFORMATIVE CHANGE: CULTURALLY RESPONSIVE TEACHING IN PHARMACY EDUCATION

A dissertation submitted to
the Graduate College of
Marshall University
In partial fulfillment of
the requirements for the degree of
Doctor of Education
In
Curriculum and Instruction
by
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Approved by
Dr. L. Eric Lassiter, Committee Chairperson
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Marshall University December 2020

APPROVAL OF DISSERTATION

We, the faculty supervising the work of Nicole Winston, affirm that the dissertation, FACULTY PERCEPTIONS AND TEACHING PRACTICES FOR TRANSFORMATIVE CHANGE: CULTURALLY RESPONSIVE TEACHING IN PHARMACY EDUCATION, meets the high academic standards for original scholarship and creative work established by the EdD Program in Curriculum & Instruction and the College of Education and Professional Development. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signatures, we approve the manuscript for publication.

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ACKNOWLEDGEMENTS

I started this journey in Fall 2015, nearly six months after my mom, "Pamela Jo" passed away from breast cancer. I remember expressing my excitement to her about pursuing a degree in education. She thought it was uncanny that nearly 100 years earlier, my great grandpa, Ruben Holly McCoy, had studied briefly at "Marshall College" to pursue medicine while putting his teaching career on hold in Point Pleasant, WV. I am so grateful that Marshall University offered me the opportunity to integrate my pharmacy training and educational research interests and pursue an Ed.D. Although Great Grandpa McCoy returned to teaching and farming before finishing his medical training, it amazes me how our journeys have coincided.

I deeply appreciate the love and support from my immediate and extended family. My sister, Briana, has been my rock and continues to be as we navigate motherhood together. My husband, Tom, and my brother-in-law, Devin, have been so encouraging as well. While my two "babies," Violet and Miles, haven't grasped what I have been working on, I am so thankful for their patience and love, especially when Mommy had to work on her "compooter." My dad, Dave, is so proud of all of us, and his love as well as my mom's is why I am the empathetic person I am today. And my parents-in-law, Pat and Mike, have expressed such interest in my research and have provided loving support that I am thankful for every day.

Finally, I want to thank my chair, Eric, and committee members, Beth and Lisa and my friend and colleague Tasha Wyatt. My first interaction with the concept of curriculum theory was amazingly painless with the guidance of Beth, and she challenged me to think deeply about the connection between theory and pharmacy curricula. Lisa's expertise in educational technology helped me become the "innovator" at the Medical College of Georgia by creating interactive sessions, animated videos, and adopting student-centered platforms for medical students. Eric

and Tasha continue to help me grasp the power of qualitative research in my mission to "change the narrative" regarding cultural diversity training in both pharmacy and medical education.

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ABSTRACT

Cultural diversity training in pharmacy education has evolved from standalone lectures to longitudinal courses, service-learning initiatives, rotation experiences, and global health opportunities. This mixed methods study explored the perceptions, attitudes, and pedagogies of pharmacy educators who have incorporated culture diversity into their classrooms and clinic sites. First, 91 online surveys incorporating items from the Teaching Multicultural Attitudes Survey and the Multicultural Competency Teaching Scale were distributed to a random sample of pharmacy faculty who interface with cultural diversity. In total, 36 completed surveys were analyzed using descriptive statistics, Pearson correlations, and stepwise linear regressions. Following the survey, seven pharmacy faculty members volunteered for one-on-one interviews. Interviews were interpreted using the five elements of culturally responsive teaching as a theoretical lens. Survey results indicated that multicultural awareness is highly relevant to the courses the participants teach, multiculturalism is rewarding, and it is important for students to be multiculturally aware. Additionally, respondents indicated they often promote diversity by demonstrating appropriate behaviors, integrate cultural values and lifestyles of ethnic minority groups into their teaching, and include examples of experiences and perspectives of these diverse groups as well. Qualitative results indicated pharmacy faculty engage in all aspects of culturally responsive teaching; namely, they create opportunities for cultural socialization, adopt diverse teaching strategies to meet student needs, learn the cultural diversity of the classroom, develop culturally relevant curricula, and demonstrate cultural compassion. The results suggest that pharmacy educators with a vested interest in culture teach to and through cultural diversity.

CHAPTER 1: INTRODUCTION

On a warm spring day, I walked with one of my medical students towards the cadaver laboratory after we had discussed how his race and ethnicity had influenced his education. Throughout our time together, I had learned how overt racism had pervaded into almost every aspect of his life and how these experiences energized him to prove to his community that compassion and empathy will prevail. We immediately connected over our innate desire to make others feel a sense of belongingness but differed in the reason why we interacted with others in this way. He used it as a mechanism for removing the perceived "threat" that he sensed when meeting racially and ethnically different people while I mirrored to others how I yearned for belongingness.

Other conversations with diverse students I have had the privilege of teaching have centered on how they act a particular way in the presence of white people to avoid stereotypes commonly associated with the black/African American community. In addition, many minority students have discussed how their family taught them from a young age to behave perfectly, since they were more likely to be scapegoated in the presence of white children. And most recently, one of my colleagues asked me why I had become so invested in improving the cultural diversity training of healthcare students; I found myself remembering distinctly how one of my African American neighbors had been victim to unfair treatment repeatedly in a predominantly white school district and how deeply it bothered me, leading me to defend him on numerous occasions.

These situations experienced by minority populations in the United States (U.S.) are not isolated to one area of our country or to a specific ethnicity or race (Coleman, Chapman, & Wang, 2013; Young, Anderson, & Stewart, 2015). Although one would hope the classroom

would provide a safe environment for students to explore their similarities and embrace their differences, recent research in pharmacy and medical education has demonstrated the pervasiveness of microaggressions, defined as either inadvertent or intentional discriminatory comments towards others, in our classrooms and clinics (Cyrus, 2017; Popovich, Okorie-Awe, Crawford, et al., 2018; Ulloa, Talamantes, & Moreno, 2016;). Moreover, even though countless research studies evaluating cultural diversity training in pharmacy students specifically have touted gains in cultural knowledge, skills, and attitudes, (Brown, Brehm, Dodge, et al., 2016; Poirier, Butler, Devraj, et al., 2009; Vyas & Caligiuri, 2010), we have yet to see substantial improvements in health disparities among minorities in the U.S. (Bilal & Diez-Roux, 2018).

Taken together, there is an obvious need for transformative teaching practices in pharmacy education to educate the next generation of culturally adept pharmacy practitioners. Even more, the increasingly diverse student pharmacists across the U.S. have provided a unique opportunity for pharmacy educators to leverage this diversity during both didactic and experiential training (Alonzo, Bains, Rhee, et al., 2019). However, before adopting and implementing pedagogical practices that incorporate culture in the classroom, we must first evaluate the perceptions and teaching practices of pharmacy educators who encounter cultural issues on a regular basis. This study examines the attitudes, teaching strategies, and experiences of pharmacy educators who have a vested interest in cultural diversity training of student pharmacists. The results will then provide guidance to all pharmacy educators on how to integrate cultural diversity across the curriculum.

CULTURAL DIVERSITY TRAINING IN PHARMACY EDUCATION

For the context of this dissertation, I want to define what I mean by "culture" and "diversity." Although many identify the term culture with ethnicity and customs, I understand

the term culture as it is defined by Drs. Kleinman and Benson (2006), in which culture is a fluid, multivariable process "through which ordinary activities and conditions take on an emotional tone or a moral meaning" (p. 1674). Their interpretation of culture is both salient and relevant to pharmacy education; he, as a psychiatrist and medical anthropologist, has studied how approaching patient encounters using an anthropological approach helps practitioners understand how patients interpret their health.

With respect to "diversity," my perspective aligns with the American College of Clinical Pharmacists (ACCP) description of diversity that includes "not only race and ethnicity but also socioeconomic status, rural and urban background, age, gender, sexual orientation, ability level, and other life experiences" (O'Connell, Korner, Rickles, et al., 2007, p. 1063). However, I also align with the elements of critical race theory that prioritizes addressing the oppression of racial minorities (Delgado & Stefancic, 2017). By doing so, this averts the tendency to equalize oppression across various aspects of diversity (Schiele, 2007).

Broadly speaking, as someone who has lived both in what one would consider a homogenous community as a young child and youth and currently living in a multicultural region of the U.S., diversity exists everywhere, and I see cultural diversity as the concept in which individuals and communities interact with the world in all aspects of life. I see cultural diversity encompassing these transformative experiences that take on meaning based on a range of unique factors. On a granular level, my research and activism focuses on minoritized communities and providing a platform for these communities that have been historically silenced.

However, why is the concept of cultural diversity and multiculturalism important in pharmacy education? If you happen to walk into any pharmacy, whether it be a chain store like Walgreens or an independent pharmacy, you will see the diversity of patients interacting with

pharmacists. I worked briefly as a pharmacy intern at the corner pharmacy, a short walk away from my childhood home, and interacted with patients from all walks of life, distinct ethnicities, and experiences. We are the most accessible healthcare providers, not requiring appointments or long wait times, making it additionally imperative for both practicing pharmacists and pharmacy students to train and engage with culturally diverse patients and experiences (Lonie, 2006).

Most recently, racial concordance both in pharmacy and medicine has emphasized the importance of a culturally diverse healthcare workforce (Alsan, Garrick, & Graziani, 2019; Anthony, 2019). Black/African American pharmacists in pharmacies across the U.S. have provided accessible and culturally concordant care to black communities (Anthony, 2019). With regard to preventative care, a study in Oakland, California demonstrated a reduction in the gap between the Black-White male cardiovascular mortality by nearly 20% (Alsan, et al., 2019).

Pharmacy education has approached cultural diversity training through a multifactorial approach. Historically speaking, calls for cultural diversity training in pharmacy began in the mid to late 1990s and involved stakeholders representing licensed pharmacists as well as students in the pharmacy pipeline (Brown & Doan, 1998; Lecca, Osemene, & Jackson, 1997). From a profession aspect specifically, Lecca and colleagues (1997) emphasized the need for training our pharmacy workforce to provide "pharmaceutical care" to an ever-increasingly diverse population, discussing how pharmacists must be aware of alternative health beliefs and appropriate communication strategies for particular cultures. As a student at a northwest Ohio pharmacy school in the early 2000s, I distinctly recall learning about conventional aspects of Hispanic/Latino cultures with respect to counseling on medication administration. Although several of the attributes discussed in the course may hold true for some Hispanic/Latino patients,

the instructor did not emphasize the practice of asking patients how culture plays a role with their healthcare decisions.

During this same time period, pharmacy education accreditation standards required that pre-professional curriculum prepare pharmacy student candidates for treating patients from culturally diverse backgrounds (American Council on Pharmaceutical Education, 1997). Brown and Doan (1998) advocated for multicultural education within pharmacy education curricula, citing students' preference for culturally relevant information as important for their training as future pharmacists. Most recently, the Standards 2016 established by ACPE have expanded upon the pre-requisite requirements to include specific outcome data tied to students' recognition of social determinants of health and cultural awareness and explicitly include cultural awareness training in Appendix 1 (ACPE, 2016). Specially speaking, the Standards describe how the curriculum should include "cultural awareness," which involves "exploration of the potential impact of cultural values, beliefs, and practices on patient care outcomes" (p. 21).

In response, pharmacy academics initiated several approaches to incorporating cultural diversity concepts into their respective curricula. Early efforts included adding several lectures to required curriculum or providing elective opportunities for student pharmacists (Evans, 2006; Onyoni & Ives, 2007; Westberg, Bumgardner, & Lind, 2005). In the early 2000s, educators at the University of California-San Francisco (UC-San Francisco) developed an intensive, one-day elective for pharmacy students that emphasized a range of topics including health perceptions, stereotypes versus generalizations, and working with Limited English Proficiency patients (Assemi, Cullander, & Hudmon, 2004). Several years later, the researchers at UC-San Francisco expanded their audience to pharmacy faculty, creating a 2-day train-the-trainer program to

educate faculty about cultural competency and implementation strategies (Assemi, Mutha, & Hudmon, 2007).

Similarly, schools and colleges of pharmacy created opportunities for introducing students to cultural diversity concepts by creating semester-long courses or integrated across semester curricula. One such elective at South University School of Pharmacy in Georgia developed in response to students' desire to learn about such topics provided case studies and ethical dilemmas to challenge students' perceptions (Evans, 2006). More recently, educators at Cedarville University School of Pharmacy integrated health literacy and cultural diversity concepts across didactic, laboratory and experiential courses in the first-year fall courses, showing gains in principles related to health literacy and cultural competency (Cailor & Chen, 2015).

Although a few cultural diversity curriculum initiatives have emphasized an anthropological approach to introduce culture (Haack, 2008; Vyas & Caligiuri, 2010; Westberg, et al., 2005), other cultural diversity courses and materials, like my own experiences described above, introduce pharmacy students to culture by describing conventional characteristics of races and/or ethnicities common in the U.S. (Halbur & Halbur, 2008). Several opponents argue that these approaches may perpetuate stereotypes (Schiele, 2007; Solorzano, 1997). Even more worrisome, the belaboring on "difference" has led many healthcare students to associate the word "diversity" with poor patient dynamics and/or outcomes (Nazar, Kendall, Day, et al., 2015).

On the other hand, pharmacy educators have developed experiential opportunities that attempt to immerse students in culturally diverse environments to reduce stereotypes, and as a result, improve students' perceptions of culturally diverse patient populations. Service-learning

opportunities focus on a student's appreciation of civic, cultural, and social issues affecting the surrounding community. As an example, educators at the University of Cincinnati created a student-driven, service-learning elective, encouraging students to create four personal learning objectives for the course to customize their experiences and reflect often on the opportunities to interact and assist with their community (Brown, Heaton, & Wall, 2007). Other initiatives have included immersing students in local culture. For example, a service-learning elective created by researchers at Creighton University School of Pharmacy challenged students to read, reflect, and engage Native American patients through a partnership with Indian Health Services paths (Roche, Jones, Hinman, et al., 2007). Such experiences were described as having a lasting impression on students' perceptions of Native American culture and health issues and future career paths (Roche, et al., 2007).

Other approaches have included rotation opportunities and global health efforts to engage students in diverse cultural environments. Educators at Drake University in Iowa created a five-week rotation at a local 340B pharmacy, serving indigent patients from diverse backgrounds (Haack, 2008). Such opportunities allowed students to work directly with culturally diverse patients and embedded discussions and reflective exercises to foster student growth (Haack, 2008). Moreover, most schools and colleges of pharmacy have developed and expanded international rotation experiences for students, with a recent review regarding pharmacy education specifically citing more than 50 programs with global health electives and eight programs that required such experiences (Bailey & DiPietro Mager, 2016).

As both a pharmacy student at another pharmacy school in the Midwest and a faculty member at a newer pharmacy school, global health rotation opportunities are highly sought after, making it difficult to accommodate all students who have expressed interest. Additionally,

although such efforts in service-learning, rotation experiences and global health opportunities are honorable, the absence of a defined meaning of "global health" and disparities among schools and colleges of pharmacy make it difficult to quantify the influence of such experiences on the cultural diversity development and appreciation of pharmacy students (Bailey & DiPietro Mager, 2016; Liu, Zhang, Liu, et al., 2015). As a whole, however, current trends in cultural diversity training both inside and outside the classroom have gained momentum in other healthcare professions, incorporating anthropological approaches to patient care by training students to use open-ended, explanatory models to gain insight about a patient's cultural influences on health and well-being (Chang, Simon, & Dong, 2012; Fisher-Borne, Cain, & Martin, 2015; Tervalon & Murray-García, 1998). As the role of cultural diversity plays a larger and larger factor to practice optimal patient care, pharmacy education should consider such strategies to enhance students' experiences.

PROBLEM STATEMENT AND RESEARCH QUESTIONS

Unequivocally, schools and colleges of pharmacy have attempted to train student pharmacists about cultural diversity in a myriad of ways; however, these previous approaches have demonstrated several shortcomings because they lack a strong conceptual framework to create transformative change. More specifically, pharmacy education literature has incorporated cultural competency models to frame the educational content (Haack & Phillips, 2012; Poirier, et al., 2009). These models aim to develop an individual's cultural competence, which the Office of Minority Health defines as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations" (Cross, et al., 1989, p. 13). Recent calls in other health professions have raised concerns with the concept of cultural competency and its innate congruency with a set of

definable skills and "pinnacle" approach (Acosta & Ackerman-Barger, 2017; Kleinman & Benson, 2006). These opponents have advocated for adopting a more humanistic approach, coined "cultural humility" that encompasses self-reflection/critique, learning from patients, building practitioner-patient partnerships, and promoting a life-long process (Chang, et al., 2012; Tervalon & Murray-García, 1998).

Although pharmacy education scholars have mentioned cultural humility in the literature, there have been no robust studies regarding its incorporation into a curriculum, nor have current cultural humility practices across the Academy been assessed. As one of the scholars known for his work on cultural initiatives in pharmacy education, Naser Alsharif (2012) emphasizes in his opinion piece that the concept of cultural humility has not yet been adopted by pharmacy educators. Additionally, he calls for its adoption to not only teach cultural humility to student pharmacists and other healthcare profession students, but also to improve interprofessional team dynamics (Alsharif, 2012).

Unlike cultural competency frameworks that aim to impart knowledge about culturally diverse people and resources to assist these individuals, teaching cultural humility requires a shift in multicultural attitudes and practices by the educator in order to demonstrate cultural humility to students (Fisher-Borne, et al., 2015; Tervalon & Murray-García, 1998). Thus, what remains to be examined in pharmacy education literature are the perceptions and practices of pharmacy educators who study and teach multicultural issues.

In order to address this deficit in pharmacy education, the following research questions will guide my research:

1. What are pharmacy faculty members' attitudes towards incorporating cultural diversity into their classrooms and/or clinic sites?

- 2. How do pharmacy faculty members incorporate cultural diversity into their teaching practices?
- 3. How have pharmacy faculty members incorporated aspects of cultural humility into their teaching practices?
- 4. What do pharmacy faculty members perceive as barriers to implementing culturally responsive teaching practices?

METHODS

Theoretical Framework

The study is grounded in social justice theories and pedagogies. Transformational theory rests upon the notion that one must become critically aware of one's own and others' implicit biases and reflect upon these assumptions (Carnicelli & Boluk, 2017). Similarly, transformative learning results from Freire's (1970) concept of *conscientization*, or more commonly termed critical consciousness, whereby learners combine rational thought and reflection in the context of observing social injustices. It is from this foundation that I framed my analysis and interpretation. More specifically, I used the five elements of culturally responsive teaching as described by Gay (2002) to evaluate the data gleaned from this study: (1) create opportunities for cultural socialization, (2) adopt diverse teaching strategies to meet student needs, (3) learn the cultural diversity of the classroom, (4) develop culturally relevant curricula, and (5) demonstrate cultural compassion.

Design and Sampling

This mixed method study examines the research questions using two validated, quantitative surveys, the Teacher Multicultural Attitude Survey (Ponterotto, Baluch, Greig, et al., 1998) and the Multicultural Teaching Competency Scale (Spanierman, Oh, Heppner, et al.,

2011) as well as a series of interview questions. After completing the quantitative survey questions, participants were asked about their interest in a follow-up interview. Purposeful sampling was instituted by creating a list of faculty members who have published literature pertaining to multicultural education, cultural competency, and/or social justice issues in pharmacy education and members of the "Health Disparities and Cultural Competence" group within the American Association of Colleges of Pharmacy. As Patton (2002) describes, purposeful sampling centers on selecting participants who will provide information-rich answers to the questions at hand.

Data Collection and Analysis

The Qualtrics survey platform (Salt Lake City, UT) was instituted for survey distribution and asked participants if they would like to participate in a follow-up interview. Raw survey data was exported from Qualtrics and analyzed using SPSS V. 25 (2017) to calculate descriptive statistics, Pearson correlations, and a stepwise linear regression. Interviews were conducted and recorded over the phone using semi-structured, open-ended questions (Bogdan & Biklen, 2007). Interviews were then logged and indexed. With respect to analysis, I employed latent projective content analysis, creating codes based on the five essential elements of culturally responsive teaching to interpret the meaning of the interview text (Gay, 2002).

Significance of the Study

Much of the extent of cultural competency or cultural diversity training research has centered upon snapshot perception changes in the population being studied. This has not yet translated into appreciable outcomes as discussed above, and in addition, systemic racism in healthcare continues to pervade our communities across the U.S. Culturally responsive teaching, on the other hand, is the lighthouse guiding us away from the old habits and privileges of the past

and has demonstrated tangible outcomes in K-12 education (Sleeter, 2011). Thus, this study evaluated current culturally responsive teaching practices of pharmacy educators as a means to leverage these methods and skills to launch a pedagogical shift towards truly student-centered teaching.

Organization of the Study

Following the Introduction, Chapter 2 expands upon the historical development of cultural diversity training of student pharmacists, the concept of cultural humility, and describes culturally responsive teaching. Chapter 3 details my research methodology including the research design, data collection, and subsequent analysis. Chapter 4 will describe the results of the quantitative survey and the qualitative interview. And finally, I will conclude with a discussion regarding the implications of the study results, reflect upon my interpretations of the data, and postulate future research in Chapter 5.

CHAPTER 2: LITERATURE REVIEW

This chapter provides a review of selected literature to expound upon several themes and concepts salient to the study. I will first explore the theoretical underpinnings of culturally responsive teaching, namely social justice and transformative learning. This will lead into a discussion about the research and scholarship on culturally responsive teaching. Following this, I will provide a literature review of current trends in cultural diversity training of pharmacy students and critique commonly used frameworks for multicultural education. I will conclude this chapter by describing how several elements of cultural humility have been demonstrated in the pharmacy education literature and how this inspired me to explore the teaching practices of those who research and teach multicultural issues.

SOCIAL JUSTICE IN EDUCATION

Social justice in the context of higher education has been interpreted, reinterpreted, adapted, and related over the last several decades (Wilson-Strydom, 2015). On a policy level, debates have centered on the access to and participation in higher education for members of society (Wilson-Strydom, 2015). Theorists like David Miller (1999) describe social justice as an understanding of how different individuals or groups endure while analyzing the disparities among such groups. In addition, Iris Young (1990) expands upon these basic ideas to concretely elaborate on two social *injustice* tenets: oppression and domination. Rather than describing what an ideal situation, experience, or institution should look like in the context of social justice, Young (1990) illustrates what detrimental facets are at play in order to challenge our current state of affairs. Nancy Fraser (2009) takes these concepts one step further by elucidating these aspects in the context of our current state of globalization and education, particularly in our

classrooms, describing three elements of social justice: redistributive, recognitive, and representational justice.

The first dimension of Fraser's (2009) framework involves the concept of redistribution, seeking a more just distribution of goods and services with respect to social class, gender, and racial-ethnic factors. As alluded to, redistributive justice encompasses economic issues, and when considering our educational system, redistribution justice explores issues regarding the appropriation of resources to school systems, educators, and students (Block, 2018). Many scholars have researched the disparities across all levels of education, especially when evaluating causes for divergent achievement gaps across the United States (Barton & Coley, 2009). However, Fraser (2009) argues that there are two additional concepts within the social justice framework that drive individuals to seek out justice or identify social injustices.

For recognitive justice, the goal is to create a society that embraces diversity and differences, in which members support and recognize distinctive characteristics and perspectives of ethnicity, race, gender, etc. (Fraser, 2009). She argues, and other scholars agree (Anast, Seguin & Ambrosio, 2002), that the surge in capitalistic societies, especially our own, has tilted the emphasis towards recognitive justice. By and large, this type of justice encompasses the cultural aspect of social justice. Most recently, the third aspect of Fraser's (2009) framework, representational justice, describes "who is included in, and who [is] excluded from, the circle of those entitled to a just distribution and reciprocal recognition" (Fraser, 2009, p.17). In other words, representational justice constitutes the political component of social justice.

Current emphases in pharmacy education regarding social justice have centered on the latter two aspects of Fraser's (2009) social justice framework. As Bush, McLaughlin, and White (2017) articulate in their review regarding diversity capabilities and social justice curriculum in

pharmacy education, the majority of research has focused on increased efforts to create environments conducive for the cultural exchanges of ideas and to increase the compositional diversity of an institution's faculty and students. Although pharmacy educators have touted gains in both these areas, Popovich and colleagues (2018) have revealed how schools and colleges of pharmacy have substantial work to do in order to adequately improve the environment and working conditions of faculty and students with respect to diversity.

On one hand, it is imperative to use frameworks such as Fraser's (2009) to guide the systems and pedagogies at all levels of education. However, I would argue that it is also essential to provide current context related to barriers of social justice in today's educational systems. To this end, embracing the concept of critical social justice, as conceptualized by Sensoy and DiAngelo (2012), which "recognizes[s] that society is stratified (i.e., divided and unequal) in significant and far reaching ways along social group lines that include race, class, gender, sexuality, and ability" (p. xx) contextualizes Fraser's framework. Even more, Sensoy and DiAngelo (2012) assert inequality is woven into the fabric of our society, and as other critical theories have professed, strive to change such inequalities.

In terms of the interface between social justice education and the requirements of educators to participate in such endeavors, Picower (2012) advocates for three distinct steps: (1) recognize and analyze injustices and how these injustices generate and maintain oppressive states, (2) integrate these analyses into the classroom, and (3) expand these teachings to beyond the classroom as a means to create activists to bring about substantiated change. Moreover, I would argue that a critical analysis of one's own biases and prejudices must precede the aforementioned first step to appropriately institute equality in the classroom. Much research in

both multicultural education and teaching diverse students has centered upon how the majority of educators interpret differences in achievement from a deficit perspective (Sleeter, 2011).

As the name implies, a deficit-oriented approach posits that students' backgrounds correlate with student achievement (Sleeter, 2011). For example, some educators may believe that students from diverse backgrounds are inhibited to achieving certain standards based on their upbringing. On the other hand, an educator who adopts a deficit-oriented approach may expect Asian American students to perform well because their culture emphasizes academic excellence. From a theoretical perspective, an educator who embraces a deficit-oriented approach would have many difficulties objectively analyzing injustices (Picower's first step) with an approach whose solution is "to 'free' students from 'pathological' cultures of their homes" (Sleeter, 2011, p. 5).

Sleeter (2011) discusses alternatives to a deficit-oriented approach that shift the educator's perspective towards resources, and more preferably, institutional attitudes and practices. The former perspective, termed "structural approaches," seeks to reduce organizational barriers to equalize opportunities for students (Sleeter, 2011). Educational opportunities and resources include ensuring students have access to a rigorous, well-instructed curriculum, and consistent expectations. The latter perspective, on the other hand, is defined by Sleeter (2011) as "emancipatory approaches," which aim to reverse the roles of teachers and students, emphasizing the students' capacities to serve as the expert to address obstacles in education. Both of these approaches create a lens for educators to adequately recognize, analyze, integrate and expand upon social injustices experienced by students and their communities. To this end, however, how would these classrooms that employ emancipatory-oriented educators look like, feel like, and

function? The next section explores the broad theme of transformative learning to elucidate these issues.

TRANSFORMATIVE LEARNING

Although the nature of education should inspire individuals to develop into independent freethinkers, current societal and systemic oppression continue to hinder these efforts. Freire (1970) emphasized how pedagogies designed as the "banking model" of education, whereby educators "deposit" facts, obligates students to further adapt to the oppressive forces rather than critically think about the world. Contrary to these methods, Freire (1970) advocates for approaches that consist both of reflection and concrete actions. It is with this transformative learning idea that Freire introduces the concept of *conscientization*, or more commonly termed critical consciousness, in which learners combine rational thought and reflection in the context of observing social injustices.

As a part of becoming critically conscious, Boylan and Woolsey (2015) emphasized the importance of exploring one's identity, which is "rooted in personal histories and given that some of the underlying fixed positions are deeply held ethical positions" (p. 63). Although the authors talk about identity with respect to teachers, this holds true for students in the classroom (Welton, Harris, & La Londe, 2015). In addition, successful multicultural initiatives have highlighted how critical thinking about social justice should be seen through two salient lenses: diversity as a "social good" and "social value" (Watt, 2013). In other words, similar to an educator's readiness to teach social justice in the classroom, students must be aware and understand their own identity and biases and be appropriately positioned to evaluate diversity in the context of social justice as a positive societal facet.

The latter aspect regarding diversity as both good and valuable is imperative for educators, students, and professionals in healthcare. One would be inclined to expect those who choose to teach and/or practice in the healthcare field have an appreciation for diversity.

Interestingly, however, Nazar, et al., (2015) discussed how themes from semi-structured interviews of medical students centered on conflicts or problems between patients and providers when asked about examples of diversity in a clinical environment. Even more disturbingly, a recent longitudinal study surveying over 3,500 students across 49 medical schools in the United States failed to see statistically significant improvement in implicit racial biases (van Ryn, Hardeman, Phelan, et al., 2015). In addition, the study also discussed how having witnessed negative comments from a clinical educator significantly increased implicit racial biases.

These unfortunate outcomes highlight a crucial issue in there is a disconnect between what is communicated as appropriate and the actions that are experienced. Just as a child mirrors the attitudes and actions of their parents or caregivers, students will emulate the attitudes and biases of didactic and clinical educators. Freire's (1970) theory of cultural action begins to unfold these concepts, advocating for "dialogical action" that seeks cooperation, unity, and organization. More recent theorists, like Mezirow, used the underpinnings of Freire's ideas to expand upon the theory of transformative learning and explicitly describes phases a learner will experience when a transformative pedagogy is implemented. The phases are (Mezirow, 1995, p. 50):

- a disorienting dilemma;
- self-examination with feelings of fear, anger, guilt or shame;
- a critical assessment of assumptions;
- recognition that one's discontent and the process of transformation is shared;

- exploration of options for new roles, relationships and action;
- planning a course of action;
- acquiring knowledge and skills for implementing one's plans;
- provisional trying of new roles;

"perspective transformation," which he describes as an:

- building competence and self-confidence in new roles and relationships;
- a reintegration into one's life on the basis of conditions dictated by one's new perspective As the phases emphasize, Mezirow's (2009) transformative learning theory has been described as a democratic process through which learners use both critical reflection and critical action as a means to evolve as both learners and people (Aubrey & Riley 2016). The critical reflection piece expects the learner to evaluate well-established social and cultural beliefs that have been constructed over their lifetime (Aubrey & Riley, 2016). Critical action, on the other hand, involves communicating their thoughts and reflections with others to validate their understandings (Mezirow, 2009). Mezirow (1981) appropriately described this process as

emancipatory process of becoming critically aware of how and why the structure of psycho-cultural assumptions has come to constrain the way we see ourselves and our relationships, reconstituting this structure to permit a more inclusive and discriminating integration of experience and acting upon these new understandings. (p. 6)

Although widely adopted across the curricula of the majority of health professions, several critiques have emphasized a few salient shortcomings of Mezirow's transformative learning. Collard and Law (1989) highlighted how Mezirow's "perspective transformation" lacked an emphasis on collective social action while Clark and Wilson (1991) criticized its lack of contextualization to maintain a connection between meaning and experience. Despite these

deficiencies, pharmacy education in particular has used Mezirow's theory of transformative learning judiciously, especially in the context of reflective learning among pharmacy students (Rathbone, Nazar, Harburn, et al., 2019; Teply, Spangler, Klug, et al., 2016; Tsingos, Bosnic-Anticevich, Lonie, et al., 2015). In the next section, I explore how recent scholars have unified the concepts of critical reflection, social action, and contextualization into teaching theory and practices.

CULTURALLY RESPONSIVE TEACHING

The question remains as to how have educators integrated social justice education with transformative learning. One such pedagogy, culturally responsive teaching, is defined by Geneva Gay (2010) as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (p. 31). She goes on to describe how this pedagogy "is the behavioral expressions of knowledge, beliefs, and values that recognize the importance of racial and cultural diversity in learning" (p. 31). Although Gay's intention and much of culturally responsive teaching practices described in the literature have centered upon improving the achievement gap between students of color and White students, studies evaluating culturally responsive teaching practices have demonstrated improvements in classroom climate and cultural sensitivity (Epstein, Mayorga, & Nelson, 2011; Larson, Pas, Bradshaw, et al., 2018). In addition, Gay (2010) emphasizes how this pedagogy offers students a critical lens with which to probe and scrutinize social injustices they experience or recognize and leverage the diversity and experiences of students in the classroom to contextualize the subject or lesson at hand.

The description of culturally responsive teaching Gay (2002) provides outlines the integration of critical reflection, social action, and contextualization necessary to bring about

powerful, transformative learning. More specifically, culturally responsive teaching has been operationalized into five essential elements for educators: (1) learning the cultural diversity of your classroom, (2) adopting diverse teaching strategies to meet student needs, (3) creating opportunities for cultural socialization, (4) developing culturally relevant curricula, and (5) demonstrating cultural compassion. In addition, other scholars have highlighted the importance of an educator to self-reflect and evaluate personal biases and beliefs before instituting culturally responsive teaching (2002). For example, Chen, Nimmo, and Fraser (2009) have developed a series of tools for educators to self-evaluate on identity, views on diversity, and ability to respond to bias.

Sleeter (2011) expands upon such self-study tools by describing how faculty perspectives can vary from a deficit-oriented approach to an emancipatory approach. A deficit-oriented approach posits that student background factors correlate with student achievement (Sleeter, 2011). For example, some educators may believe that students from diverse backgrounds are inhibited to achieving certain standards based on their upbringing. In regard to instructor-student interactions specifically, an educator who adopts a deficit-oriented approach may expect Asian American students to outperform others because their culture emphasizes academic excellence (Sleeter, 2011).

Structural approaches, on the other hand, seek to reduce organizational barriers to equalize opportunities for students (Sleeter, 2011). Educational opportunities and resources include ensuring students have access to a rigorous, well-instructed curriculum and consistent expectations. It could be argued that our current process for training student pharmacists in regard to cultural diversity is a structural-oriented approach: culturally-related courses, service-learning and global health initiatives provide culturally diverse experiences to student

pharmacists across our Academy. Thus, an educator who adopts a structural approach would maximize resources dedicated to cultural diversity training and expect all students to achieve a particular level of competence. Alternatively, adopting an emancipatory approach reverses the roles of "experts" and "students" as a means to address obstacles in education (Sleeter, 2011). Moreover, an educator who adopts an emancipatory approach celebrates student diversity and sees it as an asset. As expected, culturally responsive teaching compels educators to embrace an emancipatory approach.

But how has culturally responsive teaching weathered in our classrooms? Educators in primary and secondary education have discussed their perceptions of implementing culturally responsive teaching practices, emphasizing how this pedagogy proactively addresses the needs of diverse students (Bonner, Warren, Jiang, et al., 2018). Several small studies have demonstrated gains in learning, including Bui and Fagan's (2013) study evaluating reading comprehension of students from culturally and linguistically diverse backgrounds using culturally responsive teaching practices. The largest study to date evaluated culturally responsive pedagogy longitudinally in over 40 secondary schools in New Zealand, detailing the construction, implementation, and positive student achievement results of the project entitled Te Kotahitanga (Sleeter, 2011). The indigenous students, the Māori, were highly involved in creating the narratives that shaped the expected "Effecting Teaching Profile." In addition, timely and thought-provoking professional development initiatives demonstrated high rates of implementation as well as high teacher and student satisfaction (Sleeter, 2011).

Like other pedagogical movements, culturally responsive teaching has only been mentioned in a few health profession disciplines, and pharmacy education in particular, lacks current robust research on improvements in student achievement and cultural sensitivity. To date,

the nursing profession has discussed several aspects in relation to implementing culturally responsive teaching practices among nursing educators. Yoder (1996) first introduced the nursing profession to culturally responsive teaching practices through her qualitative work examining the teaching practices of nursing faculty in diverse classrooms. Interestingly, she did not cite common scholars in the field like Geneva Gay, but drew similar conclusions to highly effective, culturally responsive educators. Yoder (1996) described this teaching pattern as "bridging" as follows:

The fifth response pattern, *bridging*, is characterized by high cultural awareness and high culturally adaptive instructional responses to students. Increased numbers of ethnic minority students are viewed as a positive development. These educators value diversity, respect cultural differences among students, and encourage students to maintain their ethnic identity and to function biculturally. Faculty adapt as well as the students to create a comfortable learning environment and to bridge the gap between the student's cultural world and the dominate "white world." (p. 319)

Although Yoder's (2001) work emphasized the interactions between faculty and students of multicultural backgrounds, she discussed how the cultural awareness of all students in the classroom improved, analogous to the previous findings (Epstein, et al., 2011). Similar to the elements of Yoder's "bridging" teaching pattern, culturally responsive teaching as a pedagogy has the potential to not only transform the learning environment for ethnically diverse students but also increase the cultural awareness of all students involved. In the next section, I will discuss current approaches to cultural diversity training in pharmacy education and evaluate collectively based on Gay's (2002) five elements of culturally responsive teaching.

CULTURAL DIVERSITY TRAINING IN PHARMACY EDUCATION

Currently, pharmacy education has approached cultural diversity training in a multitude of ways. As discussed in the Introduction, curriculum has evolved from standalone, elective courses to service-learning and global health initiatives (Evans, 2006; Onyoni & Ives, 2007; Westberg, et al., 2005). However, pharmacy education has remained closely tied to particular frameworks that have become recently controversial. One such family of frameworks in particular involves the concepts of cultural competency. The definition of cultural competency has evolved over time, with one of the most recent interpretations encompassing an appreciation for diverse beliefs, values and behaviors as a means to tailor patient care based on cultural, social and linguistic needs (Betancourt, Green, Carrillo, et al., 2003).

Although several models have been developed, including models designed by Campinha-Bacote (1999), Purnell (2002), and Leininger (1988), the general structures develop students' knowledge, skills, and attitudes to reach a pinnacle of "cultural competency." However, several noteworthy critiques of cultural competency have added important perspectives to the development of students and professionals as culturally adept and inclusive healthcare practitioners. Even Campinha-Bacote's (2019) model has evolved in the last year, coining the term "cultural competencility" to describe the synergistic relationship between cultural competency and cultural humility. As discussions surrounding the adoption of cultural competency initiatives in pharmacy education began in the late 1990s, medical educators initiated discussions which challenged the use of cultural competency frameworks for medical student training (Tervalon & Murray-García, 1998). Such opponents contended that tying cultural diversity training to cultural competency as it is currently understood likens this training to a fixed body of knowledge, skills and attitudes that can be simply demonstrated.

Because of the emphasis on cultural competency frameworks in pharmacy education, published outcomes have centered on evaluating students' knowledge, skills and attitudes towards diverse populations (Echeverri, Brookover, & Kennedy, 2010; Poirier, et al., 2009; Westberg, et al., 2005). In particular, pharmacy scholars have frequently used four validated survey instruments to evaluate the cultural competence of student pharmacists: the Clinical Cultural Competency Questionnaire (CCCQ), the Dogra Questionnaire, the Inventory for Assessing the Process of Cultural Competence among Health Professionals (IAPCC), and the Self-Assessment of Perceived Level of Cultural Competence questionnaire (SAPLCC).

The CCCQ is a 45-item survey that evaluates knowledge, skills, encounters/situations, and attitudes towards diverse patient populations (Like, 2001). Although several studies have indicated improvements in pre-post survey results (Brown, et al., 2016; Liu, Poirier, Butler, et al., 2015), additional studies have not demonstrated statistically significant increases in several key areas. One such study that evaluated student longitudinal growth over four years of training lacked significant increases in attitudes towards health disparities, sociocultural encounters and a self-awareness of one's own biases (Crawford, Awé, Tawk, et al., 2016). Similarly, studies evaluating students' perceptions using the 25-item IAPCC survey that assesses cultural awareness, skills, encounters and desires have failed to demonstrate sustained improvements longitudinally (Cailor & Chen, 2015). These trends, although disturbing, somewhat make sense when contextualized with the current cultural diversity training in pharmacy education.

Although there has been recent movement away from cultural diversity courses and materials introducing the concept of culture by describing conventional characteristics of races and/or ethnicities common in the U.S., these models remain in effect at many institutions.

Several opponents argue that such approaches may perpetuate stereotypes (Schiele, 2007;

Solorzano, 1997). Additionally, scholars like Arthur Kleinman, a psychiatrist and medical anthropologist, have advocated for an anthropological approach to addressing culture in healthcare settings (Kleinman & Benson, 2006). Kleinman and Benson (2006) describe culture as "a process through which ordinary activities and conditions take on an emotional tone and a moral meaning" (p. 1674). They go on to describe the components and usefulness of explanatory models to connect on a sociocultural level with patients. Of note, only a handful of studies in pharmacy education have instituted versions of explanatory models as an approach to improving the cultural diversity training of students; however, all demonstrated significant gains in cultural skills and confidence in cultural encounters (Haack, 2008; Vyas & Caliguiri, 2010; Westberg, et al. 2005).

As aforementioned, several studies indicated lower scores on various cultural competency surveys as students progressed through pharmacy programs, and even more importantly, current pharmacy education literature has not evaluated cultural diversity training for tangible, real-world outcomes like reductions in health disparities. Alarmingly, a recent analysis of data available through the National Center for Health Statistics from 1999 to 2016 indicated significantly higher mortality rates among non-Hispanic black men and women, and although the trend had been downward, it has been showing evidence towards increasing in recent months (Bilal & Diez-Roux 2018). Recent findings in both medical and pharmacy education have demonstrated that interactions, informal messages, and treatment among students can be at odds from the formal cultural diversity training that is emphasized in the curriculum (Murray-García & García, 2008; Popovich, et al., 2018). Even worse, either inadvertent or intentional discriminatory comments, commonly known as microaggressions, can create unhealthy classroom environments and perpetuate the practice beyond the classroom (Pérez

Huber & Solorzano, 2015). From a global perspective, adopting a pedagogical movement like culturally responsive teaching may provide an opportunity for pharmacy educators to improve cultural diversity training of student pharmacists, measure tangible outcomes like improved health disparities, and improve the overall climate of the institution toward diverse student populations.

Advocating for the adoption of culturally responsive teaching in pharmacy education may seem overly ambitious. However, current pharmacy literature has demonstrated two elements of this pedagogy. One such element, creating opportunities for cultural socialization, has been demonstrated by several curricula descriptions and research studies, immersing students in cultural experiences both within and outside the U.S. (Bailey & DiPietro Mager, 2016). In addition, our Academy has advocated for student-centered pedagogy and encouraged collaborative, active learning for many years, and pharmacy education literature has demonstrated gains in learning outcomes, both of which fulfill the second element (Okoro, Odedina, Reams, et al., 2012; Werremeyer & Skoy, 2012). The remaining three elements, however, need to be explored further in pharmacy education; this crucial discovery has been the driving force of this study.

The final element of culturally responsive teaching requires a commitment from faculty to become cultural diversity role models for students, which Gay (2010) describes as "cultural compassion." As microaggressions and cultural insensitivity continue to pervade our academic institutions (Pérez Huber & Solorzano, 2015), Tervalon and Murray-García (1998) argue that the more appropriate approach to the cultural competency model is the concept of cultural humility. Faculty who espouse cultural humility, described in detail in the next session, will not only

create an environment ripe for learning about cultural diversity, but also create a pharmacy workforce that provides culturally sensitive patient care.

CULTURAL HUMILITY

Both Gay (2010) and Yoder (2001) advocate for educators to espouse cultural compassion and cultural awareness, respectively. But what does this look like, feel like, or sound like in the classroom or experiential learning environment? As alluded to above, current cultural competency models are highly geared towards the knowledge, skills, and attitudes of the student. However, the environment through which these ideas are conveyed must mirror a culturally sensitive setting. One of the groundbreaking papers that shifted the trajectory of cultural diversity training advocated for a patient-centered approach to culture. Two physicians, Melanie Tervalon and Jann Murray-García (1998) discuss a new paradigm at the time termed cultural humility, which is defined as follows:

It is a process that requires humility as individuals continually engage in self-reflection and self-critique as life-long learners and reflective practitioners. It is a process that requires humility in how physicians bring into check the power imbalances that exist in the dynamics of physician-patient communication by using patient-focused interviewing and care. (p. 118)

If we begin to evaluate each of the elements Tervalon and Murray-García (1998) envision, cultural humility embodies the underpinnings of culturally responsive teaching, namely social justice and transformational learning. Its analysis of power imbalances reflect the commonly cited facet of critical social justice, specifically Sensoy and DiAngelo's (2012) assertion of how inequality is endemic on our society and our ultimate goal is to change these inequalities. Moreover, its self-reflective nature emulates the emphasis of both Freire's (1970)

concept of "conscientization" and Mezirow's (1981) "perspective transformation" in which individuals recognize and evaluate their own biases and understandings of their communities. It is this connection, whereby educators "teach to and through" (as Gay has coined) cultural humility that true change will occur (Gay, 2010). In other words, pharmacy educators who adopt culturally responsive teaching practices and both espouse and teach the tenets of cultural humility will transform future pharmacists into culturally adept practitioners.

However, several have argued that the concept of cultural humility is still nebulous (Miller, 2009; Rust, Kondwani, Martinez, et al., 2006). In response to these criticisms, Chang, Simon, and Dong (2012) developed a curriculum model called the framework of QIAN, meaning humbleness in Chinese. The framework includes the elements of Question, Immersion, Active-listening, and Negotiation. With respect to the element of Question, the authors discuss how curiosity towards cultures is key to maintaining a state of self-reflection and dedication to life-long learning. The facet of Immersion highlights that every practitioner-patient encounter is a cross-cultural experience; although global health experiences are fruitful, every day interactions with patients in the community provide sociocultural experiences that enlighten both patients and practitioners.

The element of Active-listening involves patient-centered interviews and has further been described as interpreting the body, mind, and soul, assessing a patient's body language, narratives and emotions, respectively (Austerlic, 2009). The final element, Negotiation, centers on the flexibility of both the patient and practitioner to understand each other's culture and belief system (Chang, et al., 2012). Although Chang and colleagues go on to describe how this element should involve both treatment and communication strategies, I also feel it is important to think about Negotiation globally. There have been countless articles in the news highlighting how

healthcare practitioners have been discriminated against by their patients (Tedeschi, 2017); thus, creating opportunities to build cross-cultural relationships and negotiate the culture of the patient *and* practitioner is ideal for reducing these discriminatory events.

Pharmacy education has embraced several of the elements of cultural humility as defined by Tervalon and Murray-García (1998) and further elucidated by Change, et al. (2012). Many of the cultural competency course descriptions and studies have discussed self-reflective exercises and patient-focused communication strategies (Haack, 2008; Poirier, et al., 2009). In addition, several service-learning initiatives highlight the aspect of Immersion into the community, creating opportunities for cross-cultural interactions (Brown, et al., 2016). However, like culturally responsive teaching, the elements of cultural humility need to be explored further in pharmacy education. In other words, the teaching practices and attitudes of current pharmacy educators with respect to cultural diversity has not been fully elucidated in the literature and was the impetus for this study.

SUMMARY

The research and scholarship in this chapter highlighted social justice in education, transformative learning, culturally responsive teaching, and cultural humility. This discussion reviewed the underpinnings of culturally responsive teaching and how to further delineate cultural compassion or awareness. And finally, I explored the themes with reference to current literature in pharmacy education to provide a preliminary analysis of the current state of cultural diversity training for student pharmacists.

CHAPTER 3: RESEARCH METHODS

Through my own experiences as a student at two Midwestern pharmacy schools and as a pharmacy educator, I believe change is crucial to equip the next generation of pharmacy students with the tools and humility necessary to provide culturally appropriate care to patients in our communities. As discussed in earlier chapters, scholars have echoed these concerns, and small, yet incremental changes have been instituted in other health professions. From a literature perspective, cultural diversity training provided to student pharmacists has increased in types of opportunities provided and time commitment within pharmacy schools' curricula (Assemi, et al., 2004; Brown, et al., 2007; Evans, 2006).

Overwhelmingly, however, pharmacy education literature has incorporated cultural competency models to frame the educational content (Haack & Phillips, 2012; Poirier, et al., 2009). Like Kleinman and Benson (2006) describe, "Culturally competency has become a fashionable term for clinicians and researchers," (p. 1673) and discuss how this term has been diminished to a set of technical skills and inflexible knowledge base regarding other "cultures." Such opponents have advocated for adopting a more humanistic approach, of which culturally responsive teaching provides the counter narrative to these approaches (Acosta & Ackerman-Barger, 2017; Kleinman & Benson, 2006). This pedagogical method advocates for classroom experiences that provide cultural socialization, incorporate diverse teaching strategies, learn the cultural diversity of the classroom, develop culturally relevant curricula, and demonstrate cultural compassion (Gay, 2002). In addition, cultural humility, which encompasses self-reflection/critique, learning from patients, building practitioner-patient partnerships and promoting a life-long process, provides a structure for what cultural compassion looks like in the classroom (Chang, et al., 2012).

Although pharmacy education literature has largely remained mute on the concepts of culturally responsive teaching and cultural humility, pharmacy educators may in fact be incorporating many aspects of these culturally-centered methods in their classrooms. This study explored the attitudes, perceptions, and teaching practices of pharmacy educators who commonly incorporate culture into their classrooms with the following research questions:

- 1. What are pharmacy faculty members' attitudes towards incorporating cultural diversity into their classrooms and/or clinic sites?
- 2. How do pharmacy faculty members incorporate cultural diversity into their teaching practices?
- 3. How have pharmacy faculty members incorporated aspects of cultural humility into their teaching practices?
- 4. What do pharmacy faculty members perceive as barriers to implementing culturally responsive teaching practices?

I examined how culture is integrated into pharmacy classrooms and practice sites across the U.S. This research is crucial as a means to provide best practices to the Academy, especially in light of recent, alarming trends. As an example, results from a recent qualitative study by Popovich, et al. (2018) describing students' perceptions of the cultural awareness of faculty and students, indicated lack of cultural awareness, divergent cultural perspectives and microaggressive behavior within a college of pharmacy. Such behavior and cultural climate have been discussed not only in pharmacy education but across healthcare disciplines. In addition, health professions literature often cites increasingly alarming health disparities as an impetus to educate students regarding cultural awareness yet improvements in such disparities have yet to be realized (Bilal & Diez-Roux, 2018). Thus, our approach to educating students in cultural

diversity issues needs to be considered. Evaluating the attitudes and teaching practices of pharmacy educators who closely associate themselves with cultural diversity provided an environmental scan of our Academy's culturally responsive leaders. Additionally, data gleaned from this nationwide survey serves as evidence to call for the integration of the four tenets of cultural humility into pharmacy curricula as a means to train culturally aware pharmacists.

THEORETICAL FRAMEWORK

The study is grounded in social justice theories and pedagogies. Transformational theory espouses one must become critically aware of one's own and others' implicit biases and reflect upon these assumptions (Carnicelli & Boluk, 2017). Similarly, transformative learning has also been described as Freire's (1970) concept of *conscientization*, or more commonly termed critical consciousness, whereby learners combine rational thought and reflection in the context of observing social injustices. As such, I used the theoretical lenses of the five aspects of culturally responsive teaching and four elements of cultural humility to analyze and interpret the data.

MY LENS

I identify as a white female who was raised in a blue-collar household in a predominately white community. However, my immediate childhood neighborhood was more diverse than the typical neighborhoods of the local school district. I have recently realized my innate draw towards diverse people and communities, and my work both as a student and healthcare educator has provided multiple opportunities to interact with diverse students and faculty. I openly recognize my white privilege and use it as leverage to assist minorities. I am also aware of my own prejudices and biases and work every day to lessen their influences over my attitudes and behavior. This metacognitive state towards my interactions with diverse people should lead to an overall objective analysis of the data.

RESEARCH DESIGN: MIXED METHODS STUDY

Mixed methods research is a method of inquiry and analysis that has gained momentum in health profession education literature and is more accepted than purely qualitative research. As Creswell (2014) describes, the strength of mixed methods research is "the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone" (p. 4). Because I investigated the perceptions, attitudes, and practices of pharmacy educators across the U.S., it was not practical to design a qualitative case study in which I immersed myself into their classrooms and clinic sites. On the other hand, employing only quantitative methods would not provide enough detail to understand how current pharmacy educators use culturally relevant teaching methods in the classroom.

This mixed methods study used two validated surveys, the TMAS, Teacher Multicultural Attitude Survey (Ponterotto, et al., 1998), and the MTCS, Multicultural Teaching Competency Scale (Spanierman, et al., 2011), in addition to semi-structured interviews to explore the four guiding research questions. Like Creswell (2014) emphasizes, mixed methods research collects both quantitative and qualitative data as a means to explore a research problem more completely. My research methodology followed the explanatory sequential mixed methods approach, first gathering information based on the two aforementioned surveys and then building on these results with in-depth interviews of pharmacy faculty.

For the former survey, participants self-reported cultural awareness and sensitivity. The TMAS has demonstrated construct validity, criterion validity, internal consistency, and test-retest stability and has been cited on over 200 studies (Ponterotto, et al., 1998). The survey tool contains 20 items, covering topics such as attitudes toward culturally diverse students and familiarity with diversity in their respective classrooms and evaluates based on a 5-point Likert-

type scale. Table 1 illustrates the survey items of the TMAS. For the purposes of this study on pharmacy faculty, the term "teacher" was replaced with "faculty," and item five (in italics) was eliminated due to the absence of parent-teacher conferences in schools/colleges of pharmacy.

 Table 1. 20-Item Teacher Multicultural Attitude Survey

Item Number	Survey Question
1	I find teaching a culturally diverse student group rewarding.
2	Teaching methods need to be adapted to meet the needs of a culturally diverse student group.
3	Sometimes I think that there is too much emphasis placed on multicultural awareness and training for teachers.
4	Teachers have the responsibility to be aware of their students' cultural backgrounds.
5	I frequently invite extended family members (e.g. cousins, grandparents, godparents) to attend parent-teacher conferences.
6	It is not the teacher's responsibility to encourage pride in one's culture.
7	As classrooms become more culturally diverse, the teacher's job becomes increasingly challenging.
8	I believe that the teacher's role needs to be redefined to address the needs of students from culturally diverse backgrounds.
9	When dealing with bilingual children, communication styles often are interpreted as behavioral problems.
10	As classrooms become more culturally diverse, the teacher's job becomes increasingly rewarding.
11	I can learn a great deal from students from culturally different backgrounds.
12	Multicultural training for teachers is not necessary.
13	To be an effective teacher, one needs to be aware of cultural differences present in the classroom.
14	Multicultural awareness training can help me to work more efficiently with a diverse student population.
15	Students should learn to communicate in English only.
16	Today's curriculum gives undue importance to multiculturalism and diversity.
17	I am aware of the diversity of cultural backgrounds in my classroom.
18	Regardless of the makeup of my class, it is important for students to be aware of multicultural diversity.
19	Being multiculturally aware is not relevant for the subject I teach.
20	Teaching students about cultural diversity will only create conflict in the classroom.

The MCTS survey tool evaluates the participant's cultural teaching knowledge and skills using 16 items and a 6-point Likert-like scale, described in Table 2. Spanierman and colleagues (2011) demonstrated the convergent validity towards cultural sensitivity and overall construct validity of the MCTS. Similar to the TMAS questionnaire, the term "teacher" was replaced with "faculty" and item 10 was removed due to the overall lack of interaction between pharmacy educators and the parents of students. As a part of the quantitative data collection, demographic questions and questions pertaining to student contact hours and frequency of cultural issues/aspects discussed were included.

 Table 2. 16-Item Multicultural Competency Teaching Scale

Item	nen munculuru Competency Teaching Scare
Number	Survey Question
1	I integrate the cultural values and lifestyles of racial and ethnic minority groups into my teaching.
2	I plan many activities to celebrate diverse cultural practices in my classroom.
3	I plan school events to increase students' knowledge about cultural experiences of various racial and ethnic groups.
4	My curricula integrate topics and events from racial and ethnic minority populations.
5	I make changes within the general school environment so that racial and ethnic minority students will have an equal opportunity for success.
6	I consult regularly with other teachers or administrators to help me understand multicultural issues related to instruction.
7	I rarely examine the instructional materials I use in the classroom for racial and ethnic bias.
8	I often include examples of the experiences and perspectives of racial and ethnic groups during my classroom lessons.
9	I often promote diversity by the behaviors I exhibit.
10	I establish strong, supportive relationships with racial and ethnic minority parents.
11	I am knowledgeable about particular teaching strategies that affirm the racial and ethnic identities of all students.
12	I have a clear understanding of culturally responsive pedagogy.
13	I am knowledgeable about racial and ethnic identity theories.
14	I am knowledgeable of how historical experiences of various racial and ethnic minority groups may affect students' learning.
15	I understand the various communication styles among different racial and ethnic minority students in my classroom.
16	I am knowledgeable about the various community resources within the city that I teach.

The qualitative component of this study identified the processes by which pharmacy educators incorporate culture diversity into their classrooms or clinic sites. Participants were asked if they would like to be contacted for a follow-up interview asking the following qualitative, open-ended questions:

- (1) Describe your teaching responsibilities. How many students do you teach at a time? What disciplines do you teach? What is the cultural make-up of your classroom?
- (2) What is your approach to providing care for a culturally diverse patient? (if applicable)
- (3) How do you incorporate culture into your classroom? Please describe a specific example.
- (4) Describe how you interact with culturally diverse students. How do you adapt your teaching strategies?
- (5) What barriers have you come across when incorporating culture or cultural diversity into your classroom or clinic site?
- (6) How important do you feel about incorporating student self-reflection and critique regarding cultural assumptions, biases and power structures in your classroom?
- (7) How should pharmacists advocate for their culturally diverse patients and build relationships with community members?
- (8) How do you advocate for the life-long commitment of cultural diversity training?
- (9) What are your thoughts on how to decrease health disparities for culturally and/or ethnically diverse populations?

These interviews documented the participants' strategies, perceptions, and attitudes and provide flexibility to the questions asked since other issues may emerge that prompt further exploration (Glesne, 2011). As alluded to above, mixed methods studies provide several sources of data to explore complex problems, especially transformative inquires. As Creswell (2014) discusses, mixed methods designs triangulate data sources, allowing for the convergence across qualitative and quantitative data sources. Additionally, using an explanatory sequential mixed methods model has been widely accepted by fields historically accustomed to quantitative research methods, like pharmacy education (Creswell, 2014).

SAMPLING

Purposeful sampling was instituted by creating a list of faculty members who have published literature pertaining to multicultural education, cultural competency, and/or social justice issues in pharmacy education and/or subscribe to the Health Disparities and Cultural Competence SIG under AACP. As Patton (2002) describes, purposeful sampling centers on selecting participants who will provide "information-rich" answers to the questions at hand (p. 46). This follows similar sampling methods employed by Yoder (1996) who interviewed 26 nurse educators regarding their experiences teaching ethnically diverse nursing students. As Creswell (2014) discusses regarding qualitative research sampling, once saturation has been attained, no further interviews were completed.

DATA COLLECTION AND ANALYSIS

Mixed methods researchers collect data in multiple forms, employing both quantitative and qualitative methods. After obtaining IRB approval (Appendix A), informed consent (Appendix B) was obtained for all participants who completed the questionnaires and in-depth interviews, providing the following details: purpose of the research, reasons why they were selected, possible benefits/risks, the nature of study, statements regarding confidentiality, and ability to withdraw at any time (Creswell, 2014). The TMAS and the MTCS were distributed using the Qualtrics platform. Quantitative data were analyzed using SPSS V. 25 (2017) to calculate descriptive statistics, Pearson correlations, and stepwise linear regressions.

After completing the quantitative survey questions, participants were asked about their interest in a follow-up interview. Semi-structured, in-depth interviews occured over the phone and were recorded. Interviews were logged and indexed. With respect to analysis, I employed latent projective content analysis, creating a priori categories codes based on the five essential

elements of culturally responsive teaching to interpret the meaning of the interview text (Hsieh & Shannon, 2005; Kleinheksel, Rockich-Winston, Tawfik, et al., 2019). Data discussions centered upon the presence of culturally responsive teaching examples provided by the participants.

SUMMARY

The methods emphasized in this chapter discussed how a mixed methods study is best suited to explore the attitudes, perceptions, and practices of pharmacy faculty who think deeply about cultural diversity. Sampling procedures, survey instruments, and interview questions were described as well as the theoretical framework and subsequent analyses. Chapter 4 provides salient findings and analyses.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

This study was designed to explore the attitudes, perceptions, and practices of faculty members who have demonstrated interest in cultural diversity at schools and colleges of pharmacy across the U.S. The major findings from this study are organized according to an explanatory mixed method design, in which quantitative findings are analyzed and reported, then qualitative data are summarized, and finally both sets of findings are combined to determine the interpretation. Results of the quantitative data are reported based on the order of survey presentation, first describing the results from the Teacher Multicultural Attitude Survey, then the Multicultural Teaching Competency Scale. Qualitative data are summarized based on the five elements of culturally responsive teaching: (1) learn the cultural diversity of the classroom, (2) create opportunities for cultural socialization, (3) develop culturally relevant curricula, (4) adopt diverse teaching strategies to meet student needs, and (5) demonstrate cultural compassion.

These results represent a synthesis of data gathered through online surveys and one-onone interviews with self-identified participants. Data or quotes from surveys are not named due
to the anonymity of the survey dissemination and collection. Quotes from one-on-one interviews
identify participants by interview number, except for those attributed to one participant who
wished to be identified.

SURVEY RESULTS

In total, 91 online surveys were distributed in September of 2019 to a random sample of pharmacy faculty who are members of the "Health Disparities and Cultural Competency" group within the American Association of Colleges of Pharmacy. Participants received one follow-up request to complete the survey after two weeks and the survey was closed after four weeks. I received 38 surveys once the survey closed. Survey results were discarded if less than 50% of the

survey was complete, which resulted in two surveys being removed from the final dataset and a response rate of 40%. The majority of survey respondents identified as white/Caucasian (n=25, 69.4%) while the next largest group identified as black/African American (n=5, 13.9%). In addition, the majority of respondents were female (n=29, 80.1%). Table 3 describes the demographics of all respondents. All faculty reported teaching hours, on average 6.8 ± 4.7 hours per week, with an average and median of 90 students per class (range: 18 to 220). Those who also precept students at a clinic site (n=24, 66.7%) reported precepting an average of 11 ± 11.6 hours per week with an average and median of two students per rotation (range: 1 to 4 students).

Table 3. *Demographics*

Variable	Number (%)
Gender	
Female	29 (80.1%)
Male	7 (19.9%)
Ethnicity/Race	
Asian or Pacific Islander	3 (8.3%)
Black/African American	5 (13.9%)
Hispanic/Latino	1 (2.8%)
Indian/Native American	1 (2.8%)
White/Caucasian	25 (69.4%)
Other	1 (2.8%)

The results of the Teacher Multicultural Attitude Survey (5-point Likert scale) indicated that multicultural awareness is highly relevant to the courses the participants teach (average = 4.91 ± 0.296), multiculturalism is rewarding (4.81 ± 0.397), and it is important for students to be multiculturally aware (4.87 ± 0.336). The lowest scoring statement referred to the faculty's responsibility towards encouraging pride in one's culture (3.16 ± 1.11). Overall, the average score across all Likert scale questions was 4.17 ± 0.408 , translating as "somewhat agreeing" with all statements. Additional results for the Teacher Multicultural Attitude Survey are depicted in Table 4.

 Table 4. Results of the Teacher Multicultural Attitude Survey

Table 4. Results of the Teacher Multicultural Attitude Survey	
Survey Item	Mean (SD)
I find teaching a culturally diverse student group rewarding	4.81 (0.397)
2. Teaching methods need to be adapted to meet the needs of	4.16 (0.954)
culturally diverse student groups	
3. Sometimes I think that there is too much emphasis placed on	4.13 (1.070)
multicultural awareness and training for faculty members#	
4. Faculty have the responsibility to be aware of their students'	3.97 (1.062)
cultural backgrounds	
5. It is not the faculty member's responsibility to encourage pride in	3.16 (1.110)
one's culture#	
6. As classrooms become more culturally diverse, the faculty	3.16 (1.298)
member's job becomes increasingly challenging	
7. I believe that the faculty member's role needs to be redefined to	3.16 (1.110)
address the needs of students from culturally diverse backgrounds	
8. When dealing with bilingual students, communication styles often	3.47 (1.047)
are interpreted as behavioral problems	101 (0 700)
9. As classrooms become more culturally diverse, the faculty	4.31 (0.780)
member's job becomes increasingly rewarding	4.0.4.(0.000)
10. I can learn a great deal from students from culturally different	4.84 (0.369)
backgrounds	4.00 (4.040)
11. Multicultural training for faculty members is not necessary#	4.38 (1.040)
12. To be an effective educator, one needs to be aware of cultural	4.66 (0.653)
differences present in the classroom and/or clinic	4.00 (0.707)
13. Multicultural awareness training can help me to work more	4.38 (0.707)
efficiently with a diverse student population	0.70 (4.000)
14. Students should learn to communicate in English only#	3.78 (1.263)
15. Today's curriculum gives undue importance to multiculturism and	4.13 (1.070)
diversity#	
16. I am aware of the diversity of cultural backgrounds in my	4.38 (0.554)
classroom and/or clinic	
17. Regardless of the makeup of the class, it is important for	4.87 (0.336)
students to be aware of multicultural diversity	4.04.(0.000)
18. Being multiculturally aware is not relevant for the subject I teach#	4.91 (0.296)
19. Teaching students about cultural diversity will only create conflict	4.75 (0.508)
in the classroom and/or clinic#	

^{*}Reverse coded

Findings from the Multicultural Teaching Competency Scale (6-point Likert scale) indicated that the respondents often promote diversity by demonstrating appropriate behaviors (5.19 ± 0.946) , integrate cultural values and lifestyles of ethnic minority groups into their teaching (4.87 ± 0.885) , and include examples of experiences and perspectives of these diverse groups as well (4.87 ± 0.957) . On the other hand, respondents are less likely to plan activities to celebrate diversity (3.84 ± 1.508) and knowledgeable about teaching strategies that affirm racial and ethnic identities of students (3.94 ± 1.436) . Overall, the average score across all Likert scale

questions was 4.37 ± 0.807 , translating as "slightly agreeing" with all statements. Table 5 depicts all results from the Multicultural Teaching Competency Scale.

Table 5. Results of the Multicultural Teaching Competency Scale

Survey Item	Mean (SD)
1. I integrate the cultural values and lifestyles of racial and ethnic	4.87 (0.885)
minority groups into my teaching	
2. I plan many activities to celebrate diverse cultural practices in my	3.84 (1.508)
classroom	
I plan school events to increase students' knowledge about	4.10 (1.660)
cultural experiences of various racial and ethnic groups	
4. My curricula integrate topics and events from racial and ethnic	4.77 (1.087)
minority populations	
5. I make changes within the general school environment so that	4.52 (1.092)
racial and ethnic minority students will have an equal opportunity for	
success	
6. I consult regularly with other faculty members or administrators to	4.23 (1.283)
help me understand multicultural issues related to instruction	4 47 (4 007)
7. I rarely examine the instructional material I use in the classroom	4.45 (1.287)
for racial and ethnic bias#	4.07.(0.057)
8. I often include examples of experiences and perspectives of racial	4.87 (0.957)
and ethnic groups during my classroom lessons	F 40 (0.04C)
9. I often promote diversity by the behaviors I exhibit	5.19 (0.946)
10. I am knowledgeable about particular teaching strategies that	3.94 (1.436)
affirm the racial and ethnic identities of all students	0.07 (4.400)
11. I have a clear understanding of culturally responsive pedagogy	3.97 (1.169)
12. I am knowledgeable about racial and ethnic identity theories	3.97 (1.224)
13. I am knowledgeable of how historical experiences of various	4.32 (1.077)
racial and ethnic minority groups may affect students' learning	
14. I understand the various communication styles among different	4.35 (0.915)
racial and ethnic minority students in my classroom	
15. I am knowledgeable about the various community resources	4.19 (1.250)
within the city that I teach	
#D 1 - 1	

^{*}Reverse coded

Next, I performed a stepwise linear regression to predict scoring (and thus behavior) on the Multicultural Teaching Competency Scale to see if gender or ethnicity, or both affected scoring, identifying the score on the Teacher Multicultural Attitude Survey (TMAS) as a covariate. As shown in Table 6, neither gender nor ethnicity predicated higher scores on the Multicultural Teaching Competency Scale. As expected, as scores increased on the Teacher Multicultural Attitudes Scale, scores on the Multicultural Teaching Competency Scale increased, and were significantly correlated (Pearson Correlation = 0.625, p<0.001).

Table 6. Stepwise Linear Regression

	U		
Independent	Model 1 (R2 = 0.403)*	Model 2 (R2=0.400)*	Model 3 (R2=0.391)*
Variable			
Gender (Female-	0.034		
Yes)			
Ethnicity	0.204	0.164	
(Underrepresented			
Minority-Yes)			
. ,			
Co-Variate (TMAS)	6.854	7.695	7.695

^{*}p<0.01

INTERVIEW RESULTS

The results indicate pharmacy faculty who engage regularly in cultural diversity topics and interface with diverse and underserved populations, demonstrate all elements of culturally responsive teaching, and espoused cultural humility towards their students and patients. I had the opportunity to interview seven female pharmacy faculty members, representing each section of the United States as well as rural and urban settings. Class sizes ranged from 30 students to upwards of 120 students, some of which were highly diverse. The majority of participants (86%) described their role as both didactic and experiential, meaning they had contact time with students in the classroom and maintained a clinic site to precept students during experiential rotations. Despite the varied regions, diversity, and class sizes among participants, the following sections describe how these pharmacy educators implement the elements of culturally responsive teaching.

Learning the diversity of their classrooms

Participants discussed several strategies to learn and appreciate the cultural diversity of each of the pharmacy courses they teach. Faculty that highlighted the diversity of racial, ethnic, gender, background, etc., leveraged this diversity and used it as an opportunity to teach the entire class about differences and how to appreciate such diversity. One participant highlighted how the

majority of her students identified as Hispanic/Latino in addition to having several Native American students, and she described one her favorite in-class activities:

We go around, and we talk about all these traditions. I actually give [the Native American students] an option, "If you don't want to talk about yourself, you can choose a fictional character. You don't have to share. Some of them will say, "You know, I would share,

but we're not allowed to. So I'm going to talk about his culture in a book that I read."

In addition, Dr. Sally Arif pairs students up to discuss culture and find commonality among their peers. She designed an activity called "Show and Tell Your Culture," in which they are asked to pair up randomly with someone they are unfamiliar with and find a commonality in their culture. She describes further:

It could be as simple as they like a certain type of food, or that they are all from big families, or that's their only child. Whatever comes out in that conversation of talking to one another. Then they have a few weeks to work on prepping a 10 minute presentation about that, and they can bring props, they can bring anything, and they can go as deep as they want about their personal story, or they can go out and do some homework about that. This is so various that if it was that they picked Italian food as their favorite food, then talk to us about the history of that if you want. How did that become your favorite food? What does that make you feel like when you have it, and who cooks it, and where do you go for it?

These strategies not only informed faculty regarding the cultural diversity of the students they teach, but also spurred students' interests in the diversity of their own peers. For example, when discussing various traditions of each student, one of the interviewees described how students respond, "Hey, my mom says the same thing!" The participants echoed students'

enthusiasm. One participant described her upbringing in a conservative, highly homogenous community in the Midwest, and how in response to that, she is passionate about learning from diverse cultures, "Oh, my gosh. I love it. I love it because I do learn a lot from them, and they are great. So full of culture and life, it's amazing."

In addition, because of the nature of the profession of pharmacy, participants highlighted the importance of learning the diversity of the community. As one participant described:

It's helpful [for the students] to know why are we starting to see so many Venezuelans in Pittsburgh. Well, [it's] because of what's happening in Venezuela right now and it's not safe to be there. Knowing that is helpful. I know for us, in Pittsburgh, some of our refugee communities have been very successful at developing community organizations, like our Nepali speaking refugees.

Additionally, understanding and appreciating the cultural diversity of the surrounding communities was salient for creating opportunities for students to experience cultural socialization, as the next section describes.

Creating opportunities for cultural socialization

Pharmacy faculty members were extensively involved in efforts providing experiences to students that highlighted cultural diversity. Such experiences involved community work/service-learning and global health efforts. One of the participants who had both a pharmacy and social work background explained how she enlightens students on rotation about culture on a regular basis:

I look at [the patient's] culture, and I integrate culture and social determinants in every single conversation and then meet with my students four days a week. We talk about topics and cases, and every single time race is brought in, not because of the race, but

because how that can impact the medication...we talk about the culture and social determinants that impact that patient. If you tell me the patient has [diabetes], I ask them "Where do you live?" If [the patient] tell[s] me they live under the Fifth Street Bridge and [they're] on insulin, how does that impact them? How do I keep your insulin at a decent temperature so it doesn't get too hot or too cold? I bring culture and not just racial culture, I bring in all social aspects of a person's life to help [the students] understand what the patients' needs are.

Additionally, others discussed using professionals outside the pharmacy to teach students about particular cultures. Many have leveraged the knowledge and expertise of translators used in hospital and outpatient settings to provide opportunities for students to learn beyond the content emphasized in didactic courses. As one participant described:

[For] our Native American patients, you have to be very careful in the way you phrase [things] and it's actually been really enlightening. We only have a few Navajo translators in the whole hospital, but when you call them, not only will they do the translation for you, but they'll ask you, "Have you ever spoken with a Navajo patient before? Here's some things I need you to know."

Another example describes how pharmacy faculty encouraged students to seek out information regarding cultural diversity in the community based on their own interests.

I have a co-curricular requirement for students to attend presentations or speakers or meet with an international student for them to...learn more about other cultures. [I]n lab we close loop...I give them cases of how this culture could affect somebody's [appropriate] medication use.

Such examples highlight how immersing students in cultural interactions provides incredible opportunities to learn from the primary source. Participants emphasized how these experiences positively influenced students to practice cultural humility towards patients. In addition, one participant encouraged students who have had such experiences to discuss with more junior pharmacy students about how cultural diversity content in didactic courses is salient for practice. She described how one of her fourth year pharmacy students discovered a medication error while taking extra time to counsel a patient for whom English is a second language.

[The pharmacy student] was counseling the patient about this 20 milligram tablet. And he was especially intentional making sure the patient understood because they didn't speak English well. He was taking the extra time to make sure the patient understood. But then through that process, the patient said, "I thought this should be 10." Then [the student] asked, "10 what, 10 tablets? 10..." The patient answered, "No, 10 milligrams instead of 20 milligrams." So then [the student] called the provider and sure enough the provider had called in the wrong strength.

In addition, several described how fourth year students who engage in global health outreach rotations provide personal stories that speak to the importance of taking a cultural humility approach to care. They described how students asked detailed questions about how culture and social determinants of health affected each patient they interacted with.

Developing culturally relevant curricula

Without question, all participants thought deeply and critically about how to develop and feature cultural diversity topics during the didactic curriculum of pharmacy school. Several discussed the efforts they take to create culturally relevant cases for students to discuss before having such encounters in the real world. As one participant emphasized:

I work really hard with patient cases to give exposure to different either religions or cultural norms...especially because some of our people come from Seattle, which you can run into anybody there. I try to do that for most of them are case studies that I make for the beginning sciences, I try to make them as diverse as possible so that they don't get used to the names John and Mary.

Others described how they blended the class topic with student's own personal cultures and experiences. For example, one participant discussed how she developed an in-class activity when discussing the evidence-based use of over-the-counter herbal remedies and respecting a patient's desire to use herbal medications. She tasked each student to research an herbal remedy used by their family and culture, research the current evidence of the herbal, and share with the class. She described how students are surprised that so many cultures use the same remedies. To solidify the learning, she described how she challenges the students to reflect on the exercise by asking:

How would you talk to a patient about it? Did you feel vulnerable sharing that and feeling like with someone going to laugh at you because of your family has this...belief? How does that make you feel? So think about how does your patient feel if they're from a different culture. [How] do [you make] them feel comfortable to share with you? And how could you draw that out if they're not?

In addition, one participant described how she used the diversity of her university campus to recruit diverse standardized patients for exercises in the pharmacotherapy labs. She described a series of exercises including: graduate students perform as immigrants from China that are taking traditional Chinese medicine that contains the active ingredient in the new medication; faculty members in the Africana studies program that perform as patients of West African descent and have different health beliefs about high blood pressure; and graduate students of the

Muslim faith will perform as a patient with Type I diabetes presenting during Ramadan with an interpreter.

Several participants discussed providing students with material and assigning activities to learn about other cultures. However, many of the participants emphasized how culture is fluid and to not make assumptions. As one participant described:

I always emphasize multiple times [that] we're learning about this culture through an author that's published something, but really trying to keep in mind that we need to be individualizing the care that we provide to patients. Although these are some generalizations, we need to ask the patient specifically what they believe or what's important to them.

Similarly, another participant cautioned about only using race or ethnicity for patient cases or activities to emphasize a difference in treatment based on training she had received through a cultural competency workshop. She described an example of choosing Black/African American for a patient case regarding high blood pressure in order to emphasize the difference in evidence-based treatment. While this is important for students to recognize, if other patient cases are defaulted as "White/Caucasian male or female" students may view this as a stereotype. As she described, "Why can't the patient just be African-American just because they are, it doesn't have to be because you're trying to get at a certain [learning objective]." She goes on to describe, "Why can't the patient be a man who's here to pick-up for his husband?"

Although developing culturally relevant curricula does take effort, participants provided many examples of how to navigate topics related to cultural diversity in pharmacy education.

Such efforts illustrate how incorporating culturally relevant topics makes it less "different" for

those unfamiliar with other cultures. Such preparation is important to provide tools and strategies as pharmacy students work in the community.

Adopting diverse teaching strategies

While varied teaching strategies are evident across the examples that have been described previously, many of the participants were critical of themselves when asked about how they change teaching strategies based on the cultural diversity of the classroom, commenting on how they could do more to accommodate students. In addition, two participants discussed how the survey questions related to diverse teaching strategies motivated them to volunteer for the follow-up interview to learn more. During the interview, I illustrated how several of the examples each gave provided students who may not learn best through lecture the opportunity to demonstrate their abilities.

Several discussed how they made accommodations for students who self-disclosed preferences. As one participant described, "students that self-disclose to me [about] their background or what's happening, I think works a lot better when they come and say, 'These are some of the things that I need or these are some of the things that I struggle with." Another participant described how she reaches out to students with English as a second language when she assigns an advanced writing assignment, discussing the benefits of the writing center on campus.

Dr. Arif described how she approaches teaching her diverse classes, and discussed how having the opportunity to meet one-on-one with students allows her to know and understand where her students are coming from and emphasized how it is challenging in larger classrooms. When given the opportunity, Dr. Arif stated:

I'll just ask them to tell me about themselves and what their likes and dislikes may be.

Why they are where they're at, what their support system is like, and that usually is entry point to getting to know them a little bit deeper on a cultural level.

A few participants described how they offer several options for completing assignments to account for diversity among their students. One participant described "I offer a lot of options. [When] we do reviews, I'll offer it in ways where [the students] can do in a written form, face to face, in a group. I let them lead that." She goes on to describe how she uses this strategy judiciously because, "when culture is your only reason for doing it, that can isolate people, so I try hard not to do that, because it would be hard to be pointed out all the time."

Additionally, several participants described how they chose teaching strategies that emphasized the classroom as a safe space to discuss issues related to cultural diversity. When describing how she sets up sessions regarding culture and social determinants of health, one participant explained:

[When] we play a social determinants of health board game, I stress, "This is a safe space, and we want discussion to correct...our perceptions," So if [students] do say something wrong say, "Hey, I find that offensive, and I'm upset about it." We want that learning to occur. I think that's the biggest thing in the midst of this is, they don't know certain phrases or statements or assumptions come across negatively or as biased. I think it's important to call those out in a respectful way. Because the person saying it doesn't necessarily mean it harmful.

Self-reflection. One of the most salient aspects of culturally responsive teaching and social justice education in general is the copious use of self-reflection to influence the thoughts and actions of students. All participants challenged their students to think deeply about culture

and cultural interactions. As Dr. Arif emphasized how important incorporating self-reflection and critique into activities that highlight cultural assumptions, biases and power structures, "It's a 10 out of 10. I think it has to be done, I think that reflection and feedback and discussion are probably the richest ways that you can get at some of the core principles of them." She goes on to describe the difference between culturally related topics and standard courses:

What I try to do is take that message and repeat that over and over again with my students so that they realize this is not lesson where you learn and memorize and then recall on an exam. This is something that I'm trying to instill you as something that you're going to carry with you throughout all your patient experiences and that when you have trainees with you, you are going to try to infuse this into the way you train them to care for a patient.

Concerning what types of questions to ask students, one participant explained how she asks, "how does this impact you as a person, how does this impact you as a pharmacist, how does this impact our clinic and how does this change your life?" She incorporates these reflective questions after a series of exercises in the community working with patients who are homeless and/or have been diagnosed with a mental illness. In addition to these types of questions, another participant also asked her students to reflect on how their individual personality affects culturally responsive patient care by asking, "[how do] some of their inherent characteristics and personality traits work to their advantage or disadvantage when interacting with culturally diverse patients?"

Several of the participants emphasized how reading these reflections helped them understand their students and where they are coming from on a deeper level. Some participants did point out that they do experience resistance from students from time to time regarding self-

reflection, as one participant joked, "My goodness, some of my students get so irritated with my demands for them to self-reflect." As described earlier, leveraging the experience and attitudes of fourth year students to emphasize the importance of cultural diversity training and self-reflection has worked well for several participants.

Demonstrating cultural competence/humility

Similar to developing culturally relevant curricula, all participants overwhelmingly exude cultural humility through self-reflection and self-critique, advocating for life-long learning about cultural diversity, and incorporating patient-focused interviewing. During the interview process itself, and as aforementioned, several participants were highly critical of the ability to adopt teaching strategies for diverse learners. In addition, when describing activities in the classroom or work with students in the clinic, many participants emphasized the progress towards improving activities, reflecting on how they have incorporated changes to better prepare students for cross-cultural interactions. Dr. Arif reflected on her personal ambition towards culturally responsive teaching, stating, "It's going to feel uncomfortable to be a culturally responsive teacher, but you're going to see a payment...it's so, so valuable."

All participants also described an insatiable interest towards culture. They take the time to research the cultural diversity and social determinants of health related to the patients they serve. For example, one participant described:

When I approach somebody different from myself, I'm always interested in learning more about them and where they came from. It's my own internal quest for knowledge that led down this path and then learning more about how important it is and all the effects it can have.

Similarly, participants discussed how maintaining an open-mind was critical for learning and appreciating cultural diversity of both students and patients. Additionally, one participant challenged the use of the word "different" for how we sometimes try to explain culture:

When we consistently use the word "different" or "disparity" when talking about culture and diversity, we make students feel like their culture is normal. If we approach it as the normal for that individual or group, we can start to see the other person's world.

Many participants adopted an anthropological approach to patient communication, taking the time to learn about the patient before counseling on medications or recommending therapy.

As one participant described:

I ask my patients for permission to ask them questions. What I typically do is I ask them if I can ask them personal questions about their world. "Would you feel comfortable with me asking you questions or is it going to be okay if I ask you very personal questions today?" I ask [many questions] so it breaks down the barrier.

Dr. Arif described how she uses the LEARN model, which is a framework for cross-cultural communication when she interacts with patients at an inpatient, hospital cardiology service:

[I listen to] understand the patient's perspective first prior to developing a treatment plan and educating them about that. I use the LEARN model of cross cultural communication, where you would negotiate a treatment plan based off of their needs and background, and also what would be best for them from an evidence based medicine standpoint.

Similarly, another participant summed up how we should approach patient interactions by stating, "I think that as pharmacists we need to be curious and in a caring way."

Through our discussions, it was readily apparent that all participants exhibited cultural competency and humility by demonstrating such aspects through curiosity, caring, patient-

centered communication. The final sections discuss the barriers participants discussed for implementing culturally responsive teaching in the classroom and clinic.

Barriers. Throughout our discussions, participants described several barriers to both teaching topics related to cultural diversity and incorporating culturally responsive teaching strategies. When thinking introspectively, some participants described how they have a large learning curve, as one participant described her barrier as "mostly my lack of education. I grew up in eastern Washington ...and I haven't traveled very much, just a small amount. And so most of my barrier comes from my own lack of knowledge, all of the different cultural norms."

Another participant realized how helpful her fellowship training in cultural diversity issues was, stating, "I was fortunate [in that] I completed some fellowship training, and a workshop class, and that was really helpful, but if I hadn't had that, I kind of feel like I wouldn't know how to approach it and how to do it." She goes on to describe how there is lack of resources available to pharmacy faculty who want to incorporate these ideas into their classroom and clinic. "I think we talk a lot about cultural competency in education, but then when you really think about [it], how many good workshops are there, where I actually learn how to do this versus just talking about it?"

In addition and as alluded to earlier, participants described how they have struggled to get buy-in from students, especially those who are not a minority or have not experienced hardship.

As one participant described regarding a poverty simulation:

The students see [the poverty simulation] as a game, but for others that are in their groups...the stories and the cases are not that far from home. [The cases] feel very similar so it can be difficult for those students to see other students laughing or giggling about the types of decisions people are making, what they would choose to do. That has been a

struggle...trying to have a safe place for students to test these things out when not everybody in the classroom has the privilege of having it be a safe space.

She goes on to describe how the curriculum she teaches in does not integrate cultural diversity topics across the entire curriculum, explaining how students think, "Oh, it's diversity day. Oh, we're doing cultural competency day, so now we're going to think about it." Another participant described criticism she receives from some students when the topic of culture comes up in the curriculum:

There's definitely some resistance from students, certain students saying, "Why do I have to take time to learn this? I'm going to practice in my hometown, and we don't encounter people of a different race." I think convincing students that they will see patients not like themselves takes some effort to start, but once they've done it, some of the feedback I've gotten is like, "Oh wow, that was really interesting," or, "I never knew," or, "I wouldn't have done that if I hadn't been required. And I'm really glad it was."

In addition to buy-in from students, several participants discussed a lack of support from fellow faculty, some due to interest, while others described an apprehension towards incorporating cultural diversity topics in their classroom. Dr. Arif described faculty reactions, of which some have stated, "Oh, I don't want offend anyone if I brought up that experiment," or, "I don't want to make anyone feel uncomfortable talking about folk medicine because maybe they're embarrassed about it." She goes on to describe, "It's not that faculty don't want to connect with their students deeper, it's that they're just so afraid."

SUMMARY

After analyzing the data from the Teacher Multicultural Attitude Survey, the Multicultural Teaching Competency Scale, and the one-on-one interviews, the findings from the

quantitative data is strengthened and better elucidated by results of the interviews. Survey findings indicated the majority of respondents felt teaching multicultural issues were relevant to their teaching, rewarding, and salient for student learning and development. Additionally, survey respondents specified they commonly integrate values, experiences, and perspectives of culturally diverse groups and promote diversity by demonstrating appropriate behavior. Interviewees expounded upon each of these issues by describing specific examples regarding pharmacy education. They created an intuitive connection between cultural diversity and its effects in patient care. And finally, it was apparent the interviewees think deeply about culture and demonstrate cultural humility both in their teaching and clinical practice.

CHAPTER 5: DISCUSSION AND CONCLUSION

The focus of this mixed method study was to explore the attitudes, perceptions, and practices of faculty members who have demonstrated interest in cultural diversity at schools and colleges of pharmacy across the United States. The study aimed to first evaluate the responses from faculty who participated in an online survey, with survey items from the Teacher Multicultural Attitude Survey and the Multicultural Teaching Competency Scale. As Chapter Four discusses, survey responses were analyzed to shape the follow-up interviews with volunteers. Further, interview data were coded using the five elements of culturally responsive teaching, namely, (1) learn the cultural diversity of the classroom, (2) create opportunities for cultural socialization, (3) develop culturally relevant curricula, (4) adopt diverse teaching strategies to meet student needs, and (5) demonstrate cultural compassion.

This chapter provides an interpretation of the findings in relation to the initial research questions:

- 1. What are pharmacy faculty members' attitudes towards incorporating cultural diversity into their classrooms and/or clinic sites?
- 2. How do pharmacy faculty members incorporate cultural diversity into their teaching practices?
- 3. How have pharmacy faculty members incorporated aspects of cultural humility into their teaching practices?
- 4. What do pharmacy faculty members perceive as barriers to implementing culturally responsive teaching practices?

In addition, I will compare and contrast these findings with the current literature on culturally responsive teaching and cultural diversity training in pharmacy education. Limitations of the

study will also be addressed. Finally, this chapter will discuss the implications, including recommendations for future research and possible faculty development strategies to expand culturally responsive teaching methods to more faculty across pharmacy education.

INTERPRETATION AND DISCUSSION

This study extended the current research on cultural diversity training in pharmacy education by taking an in-depth look at the perceptions and teaching techniques of pharmacy educators who think deeply about multicultural issues. Broadly speaking, the findings indicated the survey respondents and interviewees felt that teaching multicultural issues were relevant to their teaching, rewarding, and salient for student learning and development. The specific findings were:

- Participants indicated that multicultural awareness is highly relevant to their courses, teaching multiculturalism is rewarding, and it is important for students to be multiculturally aware.
- Participants often promote diversity by demonstrating appropriate behaviors and integrate cultural values and lifestyle experiences of oppressed groups into their teaching.
- Participants were less likely to take responsibility towards encouraging pride in one's culture or to plan activities to celebrate diversity.
- Interviewees described how they leverage the cultural diversity of the classroom, create opportunities for cultural socialization, develop culturally relevant curricula, and continually demonstrate cultural compassion.

• The interviewees felt they had a knowledge gap regarding teaching strategies that affirm the racial/ethnic diversity of students but were enthusiastic about learning more about culturally responsive teaching strategies.

Overall, these findings suggest that pharmacy educators who have demonstrated interest in cultural diversity highly value the diversity of their classrooms and their communities. They are purposeful in their selection of topics and experiences students can participate in so students graduate with an awareness of multicultural issues. To elucidate the findings further, the next four sections will interpret the findings in relation to the preliminary research questions.

Research Question One

The first research question involved evaluating pharmacy educators' attitudes towards incorporating cultural diversity into their classrooms or clinic sites. Without question, the participants were not only positive towards incorporating cultural diversity, but also very intentional about expanding cultural diversity curriculum and highly enthusiastic about how culture shapes our interactions among peers and patients. Although difficult to capture in written form, all interviewees expressed a deep passion for learning about culture through enthusiastic phrases and voice inflections. They were first to admit their short fallings regarding cultural diversity and also indicated how this is an area of growth they continue to work on both personally and professionally.

The results of the survey and interviews regarding attitudes is particularly salient because a positive attitude toward cultural diversity is paramount to not only adopting the five essential elements of culturally responsive teaching but readying oneself for transformational learning in general. As described in Chapter 1, the underpinnings of this study involve transformational theory (Carnicelli & Boluk, 2017) and Freire's (1970) concept of conscientization. In essence,

educators who make the decision to incorporate cultural diversity topics or experiences must first be critically aware of their own and others' implicit biases and reflect upon these assumptions.

Thus, both demonstrating a positive attitude towards cultural diversity and a critical consciousness, by relating rational thought and reflection toward social injustices in health care is central for operationalizing culturally responsive teaching in the classroom and clinic site.

With regard to specific data supporting positive attitudes towards cultural diversity, the Teacher Multicultural Attitude Survey evaluated the participants' perceptions, indicating, on average, that the participants overall agreed with the importance of cultural diversity across the curriculum. When comparing these results to the original reliability and validity study of this survey (Ponterotto, et al. 1998), pharmacy educators scored higher, overall (4.16 versus 4.0). In addition, the participants found teaching culturally diverse students more rewarding (4.81 versus 4.2), highly relevant (4.91 versus 4.3), and crucial for students to be aware of multicultural diversity (4.87 versus 4.3) as compared to the cohort of teacher education students from the Ponterro study (Ponterro, et al., 1998).

More recently, and in programs more related to pharmacy education, Beard (2016), evaluated the attitudes of nurse educators using the Teacher Multicultural Attitude Scale. Surprisingly and encouragingly, our participants scored higher (4.18 +/- 0.59) than the nurse educators (3.22 +/- 0.31). This finding is significant, especially since beliefs, intentions, and outcomes are crucial for the appropriate adoption of culturally responsive teaching. In particular, our participants demonstrated what Sleeter (2011) defined as "emancipatory" approach to framing cultural experiences, aiming to reverse the roles of teachers and students and emphasizing the students' capacity to serve as the expert to address obstacles in education. As aforementioned, emancipatory approaches create a lens for educators to adequately recognize,

analyze, integrate and expand upon social injustices experienced by students and their communities.

Interviewee data provided additional insight into why pharmacy educators believed and adopted an emancipatory approach. As attribution theory explains, individuals can either see themselves as the causes of their own behavior, or contrastingly, see reasons other than themselves as the causes, as external situation attribution explains (Juvan & Dolnicar, 2014). As the former describes, interviewees described personal convictions and internal motivations for incorporating cultural diversity issues both inside the classroom and in the clinic. They were enthusiastic and thirsty for culture. This likely contributed to their receptivity, or openness to include cultural diversity issues, as the next section addresses regarding the second research question.

Research Question Two

With respect to the second research question, the Multicultural Teaching Competency
Scale illustrated the enthusiasm of the participants to integrate and promote cultural diversity in
their classrooms and clinic sites. When comparing these results to the original reliability and
validity study of this survey (Spanierman, et al., 2011), pharmacy educators scored higher on
most survey items, except for three: planning activities to celebrate diverse cultural practices,
changing the school environment to provide equal opportunities for success for racial and ethnic
minorities, and knowledge regarding the historical experiences of racial and ethnic minority
groups. Surprisingly, participants in this study scored higher than Spanierman et al. (2011) study
with respect to understanding racial and ethnic identity theories. This finding is significant since
most pharmacy educators do not receive formalized training in teaching and education.

Interviewees were very thoughtful in their approaches to incorporate cultural diversity into their classrooms. Simply put, pharmacy educators leverage the diversity of their classrooms, create opportunities for cultural socialization, and develop culturally relevant curricula. For those who discussed having highly diverse pharmacy student demographics, the findings indicated they leveraged this diversity to teach each other about diversity and cultural customs. The practice of using peers to teach about cultural diversity is important; firstly, it engages students to interact with one another and learn from each other, secondly, and most importantly, it validates the importance of the cultural aspects of those within the classroom and makes others feel "less different" because of commonalties the students find among one another.

With respect to creating cultural socialization opportunities, the interviewees discussed techniques like sharing an over-the-counter or herbal remedy used in one's culture or asking about common traditions for each student to share. They discussed how highly effective these strategies are, especially since it is a way to reduce barriers and provide opportunities for students to learn among one another. Likewise, Dr. Arif's activity called "Show and Tell Your Culture" allows a pair of students to learn at least one commonality between each other and explore that similarity deeply to present later on to the class.

Interviewees that described classrooms as less demographically diverse discussed how they looked outwardly to the community to provide experiences for students. In community experiences, pharmacy educators commonly asked for permission to ask about cultural and social issues, and actively searched for information regarding diverse populations to better prepare themselves and their students to interact with the community. Even at schools and colleges of pharmacy with 90% or greater White/Caucasian student demographics taught to and through diversity. For example, in regions where cultural diversity was scarce, pharmacy

educators provided opportunities for students to volunteer at homeless shelters to discuss medication management. In addition, and as the pharmacy education literature has indicated, global health experiences provide opportunities for students, especially in regions where diversity is lacking (Alsharif, 2017; Steeb, Miller, Schellhase, et al., 2019). Immersing students in new cultural experiences, especially in countries that are considered low to middle income countries, demonstrated increased awareness regarding patient-centered care and cultural sensitivity (Steeb, et al., 2019).

In addition to leveraging classroom diversity and cultural socialization opportunities, the interviewees discussed in length how they create purposeful curriculum geared towards highlighting the complexity of cultural diversity. Patient cases that are used commonly across curricula at schools and colleges of pharmacy provide a simple way of emphasizing how culture influences patient care. Providing exposure to cultural diversity in the "safe" environment of the classroom allows students to experience such diversity and ask salient questions before having an encounter with a real patient. The key, however, to create a significant learning experience for students is to incorporate reflection as a part of the process. Kolb's learning theory suggests that rigorous reflection on the part of learners allows them to examine the values and assumptions that guide their interactions (Kolb & Kolb, 2005). Thus, reflection is a means to identify reasons for acting a particular way and revealing frames of reference that best explain why students acted or responded in such a way.

Research Question Three

Although my third research question seems similar to question two, it is best to redefine what the term "cultural humility" means. Briefly, cultural humility encompasses four elements: self-reflection/self-critique, life-long learning, learning from patients, and building a partnership

with patients and community members (Tervalon & Murray-García, 1998). Across all participants, the Multicultural Teaching Competency Scale results demonstrated they promote cultural diversity by expressing such behaviors in the classroom and/or clinic. This item in particular scored the highest out of all questions (5.19 ± 0.946), indicating participants agree to strongly agree in promoting appropriate culturally sensitive behavior.

On a more granular level, the interviews provided insight into how pharmacy educators demonstrate cultural humility. Incorporating self-reflection, as discussed in the previous section, was emphasized by all interviewees as well as incorporating self-reflective exercises into their activities and experiences. And more importantly, all discussed how they often self-critique and evaluate their own biases and several described how they disclosed these self-reflections to students to demonstrate how self-reflection is crucial to be a culturally sensitive practitioner. Moreover, interviewees demonstrated self-reflection through the interview process itself, poignantly describing their self-awareness of biases and also discussing their knowledge gap regarding culturally responsive teaching.

In regard to life-long learning, interviewees described how they emphasized to students how they continue to learn about cultural diversity and how it affects patient care. Dr. Arif in particular describes to her students each year how cultural diversity is not something to memorize, but to carry along into practice to improve patient experiences. Interviewees also emphasized their enthusiasm towards cultural diversity. Additionally, several participants adopted an anthropological approach to pharmacist-patient interactions and one participant in particular emphasized how cultural "differences" are actually cultural norms for patients from culturally diverse backgrounds.

Lastly, Tervalon and Murray-García (1998) emphasized the need to immerse health care trainees in the communities to optimize the health of communities and provide opportunities for advocacy. The authors go on to describe, "[Cultural] competence, thus, again becomes best illustrated by humility, as physician trainees learn to identify, believe in, and build on the assets and adaptive strengths of communities and their often disenfranchised members" (p. 122). The results of the interviews auspiciously illustrate Tervalon and Murray-García's sentiments towards community-based care and advocacy, as indicated by the majority of interviewees working with disadvantaged and minoritized groups in the community.

Research Question Four

An important aspect of forwarding a movement, especially in terms of teaching strategies, is evaluating barriers to foresee obstacles in adopting new pedagogies across an institution, or even more broadly, across an academy of schools and colleges. Although interviewees discussed several barriers, including lack of knowledge regarding cultural norms and difficulty securing buy-in from students and faculty, these issues are to be expected and are well-documented in the culturally responsive teaching literature (Jenkins & Alfred, 2018; Sleeter, 2011;).

For Sleeter's (2011) study in Maori students, she discusses how knowledge deficits may hinder teachers from mastering new pedagogies. Specifically she describes:

If a particular teacher lacks basic subject matter knowledge and/or has major shortcomings in classroom management, it would be unrealistic to expect teacher education focused on culturally responsive pedagogies to remedy these kinds of underlying problems and skill deficits. (p. 79)

Several of the interviewees voiced concerns about their lack of knowledge regarding cultural diversity so it is likely that faculty as a whole have concerns about such deficits. Although groups like the "Health Disparities and Cultural Competency" group often provide sessions regarding cultural diversity topics, the faculty members who need the most in terms of knowledge gaps may not be taking advantage of such resources.

Increasing buy-in from faculty and students is a commonly cited barrier to cultural diversity training. Interestingly, studies have demonstrated that implementing culturally responsive teaching with extensive faculty development initiatives involving shadow coaching and co-construction meetings significantly improve implementation (Averill, Anderson, & Drake, 2015; Sleeter 2011). Additionally, the interview data seems to suggest that rather than a faculty "buy-in" problem, we have more of a faculty "fear" problem, in which faculty are afraid to offend students from all cultural and ethnic backgrounds. When this pedagogy is implemented across a curriculum, the student-centered approach improves student morale for not only students from an underrepresented minority, but for all students (Powell, Cantrell, Malo-Juvera, et al., 2016). This study supports this finding in the literature through first-hand accounts of pharmacy educators seeing students react positively to cultural diversity experiences and activities.

Several of the interviewees described how they have attempted to overcome such immediate barriers, including an integration of cultural diversity across the curriculum and advocating for additional faculty training. When implementing culturally responsive teaching practices, pedagogy experts like Geneva Gay (2010) and the literature as a whole support robust, longitudinal faculty training (Bishop, Berryman, Wearmouth, et al., 2012; Cavanagh, 2007). Constructive feedback and reflection are key to creating a pool of high implementers that hold culture at the forefront of pharmacy education.

LIMITATIONS

As with all research, there are several limitations in this study. First, both the survey results and interviews included a small number of participants. Expanding this research set to include all faculty interested in cultural diversity would provide additional insight into strategies and barriers that faculty have encountered. Second, neither quantitative nor qualitative data were collected from students. Such data may have augmented both the survey and interview data or may have contradicted the findings. In particular, when interviewees described certain strategies or activities as successful, students may have felt the contrary. In addition, it would have provided more information about the pharmacy educators behaviors in the classroom, either supporting or dissenting their own self-evaluations. However, this limitation provides an opportunity for future research

Lastly, my own biases and investment in this project may have affected the results of the qualitative data. Although I disclosed my thoughts regarding biases in the Introduction, my thoughts and experiences may have skewed my interpretation of the interviews. Another pharmacy educator, or more broadly speaking, another educational researcher may have obtained different results. However, the findings of this study have both theoretical and applicable implications for pharmacy educators and the expanding interest of cultural diversity in pharmacy curricula.

IMPLICATIONS

Three important implications result from this work. First, pharmacy educators who have a vested interest in cultural diversity have positive attitudes towards diversity in their students and patients. One would expect these results with faculty who choose to join likeminded educators in educational groups like the "Health Disparities and Cultural Competency" cohort. Surprisingly,

however, survey participants scored higher that nursing faculty with respect to attitudes towards cultural diversity. The results are encouraging and should only improve as cultural diversity initiatives expand across the pharmacy academy.

Second, pharmacy educators have demonstrated several strategies to incorporating cultural diversity into their classrooms and clinics. Faculty use unstructured activities like asking about cultural traditions for everyone to learn about each other and structured activities like case studies and simulations to emphasize how culture influences pharmacotherapy. Additionally, real-life experiences with patients in the local community and abroad allow students to implement the strategies they learned within the classroom. Although some strategies for expanding cultural diversity curriculum in pharmacy education have been published, the richness provided from this study's interviews help lay the groundwork for developing best practices. We need to continue to increase awareness through additional publications, workshops, and seminars.

Lastly, integrating cultural diversity across the curriculum will likely improve student buy-in, while robust training is needed to increase faculty buy-in. This was emphasized again and again in Sleeter's (2011) culturally responsive teaching study to improve Maori student outcomes in New Zealand and has also been emphasized in smaller studies in K-12 education (Bishop, et al., 2012; Cavanagh, 2007). The next section briefly describes recommendations for faculty development that should, in turn, lead to increased faculty buy-in.

Faculty Development

For the latter implication, designing training initiatives for faculty is crucial to meet our current diversity challenges in a way that is responsive to the changing demographics in the U.S. Standalone workshops have not demonstrated evidence reflecting changes in educators'

approaches and influencing salient student outcomes (Guskey & Yoon, 2009). Rather, well-defined faculty development programs must encompass "best practices" (Guskey & Yoon, 2009; Yoon, Duncan, Lee, et al., 2007). One of the best forms of faculty development is known as "shadow coaching," in which mentors support individual educators by providing feedback regularly in the classroom and encourage instructors to reflect and self-critique on their goals, teaching, and forms of assessment (Sleeter, 2011). Shadow coaching also involves groups of mentors and mentees meeting regularly as a part of this process to reflect collaboratively on their experiences and develop solutions to problems arising in their respective courses (Sleeter, 2011). It is the purposeful and targeted follow-up after ongoing faculty peer observations that helps ensure that faculty implement effective teaching models, but also avoid maladaptation of key elements which could result in unintended variations of culturally responsive teaching (McLaughlin & Mitra, 2001).

Sources of mentors equipped to provide shadow coaching at a school or college of pharmacy include faculty who have pursued additional training in education, completing coursework through colleges or departments of education toward certificates or degrees. Participants in this study should view themselves as potential mentors to train faculty. In addition, pharmacy educators can reach out to university-wide institutions like centers for teaching and learning to request mentors who have been trained in culturally responsive teaching.

RECOMMENDATIONS FOR FUTURE RESEARCH

This study provides a foundation to the attitudes, perceptions, and strategies pharmacy educators use that think deeply about cultural diversity. To understand these aspects across the pharmacy academy, a mixed method study evaluating faculty who do not interface with cultural

diversity groups or platforms is warranted. Similar to this study, using the Teaching Multicultural Attitude Survey, the Multicultural Teaching Competency Scale, and follow-up interviews would shed light on how faculty development and training can be tailored to their individual needs regarding cultural diversity training.

Additionally, for schools and colleges of pharmacy that choose to implement culturally responsive teaching practices, a robust study similar to Sleeter's research is appropriate. This study used a qualitative approach by applying the Research, Implementation, Development, and Evaluation model and using narratives and observations before, during, and after implementation to evaluate for success (Sleeter, 2011). Frequent classroom observations were key to providing a rich data set to interpret and analyze for creating a framework of best practices. Additionally, as a component of the research design, students' attitudes, perceptions, and culturally relevant practices would be studied extensively. Additionally, student outcomes were assessed using a pre-/post-study design. Although much of the pharmacy literature uses surveys to assess pre-/post attitudes to evaluate new cultural diversity initiatives, it would be interesting and provide greater evidence to favor of culturally responsive teaching to see improvements in student scores across the curriculum.

A FINAL REFLECTION

As my understanding of cultural diversity and the plight of minority students and patients grows, I see culturally responsive teaching as a major shift in focus from a structural approach to an emancipatory approach. Yes, resources are incredibly important for the success of cultural diversity initiatives to prosper in our professional programs, but in addition, we need to train faculty to exude cultural humility to provide a student-centered learning environment. This learning environment will extend into how future pharmacists see and interact with their patients.

And finally, I now have a better understanding of the power of semi-structured interviews. The amount of detail and experience provided by the interviewee is astounding. In many instances, I felt like I was experiencing the activity the faculty member was describing. The richness of these narratives is important, especially since replicating such activities requires a deep understanding of how and why activities were implemented in a particular way. My hope is that we continue to share the remarkable work of faculty who cherish cultural diversity and increase awareness of the power of culturally responsive teaching in pharmacy education.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL



Office of Research Integrity Institutional Review Board One John Marshall Drive Huntington, WV 25755

FWA 00002704

IRB1 #00002205 IRB2 #00003206

August 23, 2019

Luke Lassiter, PhD Curriculum and Instruction Department

RE: IRBNet ID# 1482745-1

At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Lassiter:

Protocol Title: [1482745-1] Culturally Responsive Teaching in Pharmacy Education

Site Location: MU

Submission Type: New Project APPROVED

Review Type: Exempt Review

In accordance with 45CFR46.104(d)(2), the above study was granted Exempted approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Designee. No further submission (or closure) is required for an Exempt study <u>unless</u> there is an amendment to the study. All amendments must be submitted and approved by the IRB Chair/Designee.

This study is for student Nicole R. Winston.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/ Behavioral) Coordinator Anna Robinson at (304) 696-2477 or robinsonn1@marshall.edu. Please include your study title and reference number in all correspondence with this office.

Sincerely,

Bruce F. Day, ThD, CIP

Director, Office of Research Integrity

APPENDIX B: CONSENT FORMS

	Marshall University IRB	
MARSHALL	Approved on:	8/23/19
	Study number:	1482745

Consent to Participate in Research - Verbal Presentation

Hello, my name is Nicole Winston. You have indicated your interest to be in a study about culturally responsive teaching in pharmacy education. This study involves research. The purpose of this research study is to evaluate the perceptions and practices of pharmacy educators who study and teach cultural diversity issues. This will take 30 minutes of your time. If you choose to be in the study, I will ask you several questions and you will be expected to answer the questions.

There are no foreseeable risks or benefits to you for participating in this study. There is no cost or payment to you. If you have questions while taking part, please stop me and ask. Your responses will remain confidential. If we publish the information we learn from this study, you will not be identified by name or in any other way unless you specifically ask to be recognized.

Please verbally state your choice.

You give consent to share your name in this study. Yes or No

You wish to be identified in the final report. Yes or No

If you have questions about this research study you may call me at 330-418-1424 and I will answer your questions. You should also contact my dissertation chair and the study PI Eric Lassiter at 304-746-1923 in the event of a research related injury. If you feel as if you were not treated well during this study, or have questions concerning your rights as a research participant call the Marshall University Office of Research Integrity (ORI) at (304) 696-4303.

Your participation in this research is voluntary, and you will not be penalized or lose benefits if you refuse to participate or decide to stop. May I continue?

Anonymous Survey Consent

Luke Eric Lassiter, Ph.D., Principal Investigator Nicole Winston, PharmD, Co-Investigator

Approved on: 8/23/19

You are invited to participate in a research project entitled "Culturally Responsive Teaching in Pharmacy Education" designed to analyze to evaluate the perceptions and practices of pharmacy educators who study and teach multicultural issues. This study is student generated research by Nicole Winston, PharmD, CI and EdD candidate, advised by dissertation committee chair and PI Luke Eric Lassiter. It has been approved by the Marshall University Institutional Review Board (IRB).

This survey is comprised of approximately 40 questions, mostly Likert scale, and will take between 10-15 minutes to complete. Your replies will be anonymous, so do not type your name anywhere on the form. There are no known risks involved with this study. Participation is completely voluntary and there will be no penalty or loss of benefits if you choose to not participate in this research study or to withdraw. If you choose not to participate you can leave the survey site. You may choose to not answer any question by simply leaving it blank. Once you complete the survey you can delete your browsing history for added security. Completing the on-line survey indicates your consent for use of the answers you supply. If you have any questions about the study, then you may contact the dissertation chair and PI Eric Lassiter at 304-746-1923 or CI Nicole Winston at 330-418-1424.

If you have any questions concerning your rights as a research participant you may contact the Marshall University Office of Research Integrity at (304) 696-4303.

By completing this survey you are also confirming that you are 18 years of age or older.

Please print this page for your records.

If you choose to participate in the study you will find the survey at https://marshall.azl.qualtrics.com/jfe/form/SV 0dHfhiHJoUm7f81.