A CASE STUDY OF FACTORS THAT INFLUENCE THE IMPLEMENTATION OF FULL SPECTRUM CONTRACEPTIVE CARE IN A UNIVERSITY STUDENT HEALTH CENTER

CECILE DAHLQUIST

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A CASE STUDY OF FACTORS THAT INFLUENCE THE IMPLEMENTATION
OF FULL SPECTRUM
CONTRACEPTIVE CARE IN A UNIVERSITY STUDENT HEALTH CENTER

A Dissertation
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
in
Educational Leadership

by
Cecile Dahlquist
June 2020
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Approved by:

Edna Martinez, Committee Chair, Education
Patricia Smith, Committee Member
Doris Wilson, Committee Member
ABSTRACT

Large, prospective cohort studies such as The Contraceptive Choice Project have been conducted regarding safety, efficacy, satisfaction, and usage of Long Acting Reversible Contraception (LARC) such as the Contraceptive Implant (Nexplanon) and Intrauterine Contraception (Winner, Peipert, Zhao, Buckel, Madden, Allsworth & Secura (2012). Despite these findings, access and financial barriers remain for many women, and less than 7 percent of women utilize the most effective methods of contraception in the United States (Winner et al., 2012). Barriers to effective LARC methods exist at a higher rate with our young, poor, and non-white marginalized populations (Finer & Zolna, 2016).

Unplanned pregnancies have a significant impact on the retention of college students. In the United States, 1 in 10 dropouts among female students at community colleges are attributed to unplanned pregnancy and 7 percent of dropouts among community college students overall (Prentice, Storin, & Robinson, 2012). Carr, Raker, Clark, Khan, and Allen (2018) noted that although a large percentage of the 20 million college students in the U.S. obtain their contraception through student health centers, there is a gap in the literature regarding implementation of LARC services (Carr, Raker, Clark, Khan, & Allen, 2018). Therefore, the purpose of this case study was to explore the factors that influence the implementation of full-spectrum contraceptive care, including the most effective LARC methods, in a comprehensive, public, university student health center. A critical organizational theory lens and a critical feminist theory
lens was utilized to better understand barriers to effective contraception including institutional problems such as the role of embedded racism, classism and gender issues.

The research questions guiding this study were: 1) How does a four-year public university student health center implement full-spectrum contraceptive services for their student population? 2) What are the factors influencing the provision of full-spectrum contraceptive care in a four-year, public, comprehensive university student health-center? 3) In what ways, if any, do student demographics influence the provision of contraception in the student health center?

The four major interrelated themes constructed from the data included: 1) Essentialization of Students and the Influence on Operationalization of Student Health Services in Regard to Full-Spectrum Contraceptive Care, 2) Fear and Discomfort as Drivers of Decisions Regarding Full-Spectrum Contraceptive Care, 3) Organizational Structure and Power Dynamics and their impact on Institutional Culture which Influences the Implementation of Full-Spectrum Contraceptive Care and 4) External Drivers of Decision Making in Regard to Full-Spectrum Contraceptive Care in a Student Health Center. These findings are discussed, as are implications for policy, practice and future research.
ACKNOWLEDGEMENTS

I want to acknowledge and thank my committee members for their generous time, wisdom, and expertise. Dr. Patricia Smith and Dr. Doris Wilson, I appreciate your encouragement and support from my initial musings and thoughts about graduate school through the birth of this dissertation. You have been present through this entire process. I could not have asked for better company.

In particular, I acknowledge and thank my committee chair, colleague, and friend, Dr. Edna Martinez. This dissertation was shaped and inspired by your thoughts and dreams as well as the many other educational leaders who dream of a world where equity and justice are embedded in individual and institutional hearts and minds.
DEDICATION

I dedicate this dissertation to my family. In particular, a special thank you to my husband Greg for many hours of proofreading, discussions regarding the difference between equality and equity and inspirational meals. In addition, thank you to my wonderful children (and their spouses), Nic, Li, Erik, and Jacky for their encouragement, inspiration, and support. Your patience has paid off; I predict a sharp decrease in discussions of Long-Acting Reversible Contraception at the dinner table.

I also dedicate this dissertation to the many friends and colleagues who have supported me along the way. I appreciate your laughter, encouragement, wisdom, long walks, and diversionary activities.

Finally, I dedicate this dissertation to the memory of my parents, Rosa and Nguyen Duc-Thanh, who taught me about the courage, bravery, persistence, and hard work it takes to accomplish dreams.
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CHAPTER ONE

INTRODUCTION

Large, prospective cohort studies such as The Contraceptive Choice Project have been conducted regarding safety, efficacy, satisfaction, and usage of Long Acting Reversible Contraception (LARC) such as the Contraceptive Implant (Nexplanon) and Intrauterine Contraception (Winner, Peipert, Zhao, Buckel, Madden, Allsworth & Secura (2012). Despite these findings, access and financial barriers remain for many women, and less than 7 percent of women utilize the most effective methods of contraception in the United States (Winner et al., 2012). Barriers to effective LARC methods exist at a higher rate with our young, poor, and non-white marginalized populations (Finer & Zolna, 2016).

In this chapter, the problem of inequitable access to full-spectrum contraception and unplanned pregnancy in the United States is reviewed. The impact of unplanned pregnancy on college students in the United States is discussed. Barriers to the most effective contraceptive methods such as Long-Acting Reversible Contraception (LARCs) are explained. Reproductive equity issues are addressed regarding barriers to effective LARC methods in marginalized populations. In addition, the role of student health centers in decreasing barriers to effective contraception for our most vulnerable populations are considered. Gaps in the literature regarding the provision of effective contraception in student health centers are addressed. Viewing the above
problem through a critical lens using Critical Organizational Theory and Critical Feminist Theory is discussed as a way to uncover qualitative, embedded, institutionalized factors which may impact the implementation of full-spectrum contraceptive care in a student health center.

Problem Statement

Inequitable Access to Effective Contraception

Large, prospective cohort studies such as The Contraceptive Choice Project have been conducted regarding safety, efficacy, satisfaction, and usage of Long Acting Reversible Contraception (LARC) such as the Contraceptive Implant (Nexplanon) and Intrauterine Contraception (Winner, Peipert, Zhao, Buckel, Madden, Allsworth & Secura (2012). Despite these findings, access and financial barriers remain for many women, and less than 7 percent of women utilize the most effective methods of contraception in the United States (Winner et al., 2012). Barriers to effective LARC methods exist at a higher rate with our young, poor, and non-white marginalized populations (Finer & Zolna, 2016).

Unplanned Pregnancy in the United States

Almost 45% of all the pregnancies in the United States are unplanned despite the availability of effective Long-Acting Reversible Contraception (LARC; Centers for Disease Control and Prevention, 2019). The Centers for Disease Control and Prevention (CDC) defines a pregnancy as unintended if it is either mistimed or unwanted at time of conception (Centers for Disease Control and
Prevention, 2019). LARCs include all forms of long-acting reversible contraception (e.g. the contraceptive implant and intrauterine contraception). Studies have shown LARC methods to be 20 times more effective than the more popular short acting methods such as the pill, patch, ring, injection, and condoms (Allsworth, Secura, Madden, Mullersman, & Peipert, 2010; Birgisson, Shao, Secura, Madden, & Peipert, 2015; Winner, et al., 2012).

Large, prospective cohort studies such as the Contraceptive Choice Project have been conducted regarding safety, efficacy, satisfaction, and usage of LARC such as the Contraceptive Implant (Nexplanon) and Intrauterine Contraception (IUC). Results found the effectiveness of LARCs to be far superior to that of the pill, patch, or contraceptive ring. The study shows high utilization, satisfaction, and continuation rates for LARC methods if access and financial barriers are removed and evidence-based patient education is offered (Birgisson, Shao, Secura, Madden, & Peipert, 2015). Despite these findings, access and financial barriers remain and less than seven percent of women utilize the most effective methods of contraception in the United States (Winner, et al., 2012).

Unplanned Pregnancy and College Students

Barriers to effective LARC methods exist at a higher rate with our young, poor, and non-white marginalized populations (Finer & Zolna, 2016). Most unintended pregnancies are due to contraceptive failure attributed to inconsistent or incorrect use of contraception. The highest rates of unintended pregnancy
occur in the 20 to 24-year-old age group followed by the 18 to 19-year-old age group (Finer, & Zolna, 2016; Winner et al., 2012). Unplanned pregnancies have significant impact on retention of college students. In the United States, one in 10 dropouts among female students at community colleges are attributed to unplanned pregnancy and seven percent of dropouts among community college students overall (Prentice, Storin, & Robinson, 2012). Carr, Raker, Clark, Khan, and Allen (2018) noted that although a large percentage of the 20 million college students in the U.S. obtain their contraception through student health centers, there is a gap in the literature regarding implementation of LARC services (Carr, Raker, Clark, Khan, & Allen, 2018).

The study addresses the problem of factors that influence implementation of full spectrum contraceptive care, including the most effective LARC methods, in a public university student health care center.

Purpose Statement

Quantitative research which recommends increasing LARC access and availability for our most vulnerable populations exists; however, a myriad of barriers to effective LARC contraception remains for these patients (Birgisson, Shao, Secura, Madden, & Peipert, 2015). Therefore, this case study was to explored the factors which influence implementation of full-spectrum contraceptive care in a comprehensive, public, university student health center. This study utilized a Critical Organizational Theory and Critical Feminist Theory lens to better understand barriers to effective contraception including institutional
problems such as the role of embedded racism, classism and gender issues. Examining these barriers through a qualitative research lens provided further insight into reducing the barriers to effective contraception with the potential to decrease unintended pregnancy for the 20 million college students who obtain their contraception through student health centers. (Carr, Raker, Clark, Khan, & Allen, 2018).

Research Questions

The purpose of this case study was to explore the factors which influence the implementation of full spectrum contraceptive care in a comprehensive, public, university student health center. The research questions that guided this case study were:

1) How does a four-year public university student health center implement full spectrum contraceptive services for their student population?

2) What are the factors that influence the implementation of full spectrum contraceptive care in a four-year, public, comprehensive university student health-center?

3) What role do the demographics (race, socio-economic status etc.) of a public, comprehensive university campus impact provision of contraception in student health centers?

For the purpose of this study, full-spectrum contraception includes both short and long-acting reversible contraception (LARCs). LARCs include
Intrauterine Contraception (IUC) and the Contraceptive Implant. Short-acting contraception includes the contraceptive pill, patch, ring, injection and condoms.

**Conceptual Framework**

This qualitative research study was grounded in Critical Feminist Theory (CFT) and Critical Organizational Theory to gain a better understanding of the factors which influence provision of full spectrum contraception in a student health center. Access to effective reproductive health options should be available to everyone regardless of age, race, ethnicity, or socio-economic status. Given the history of reproductive injustice in the United States and the current disparities which exist, we must consider power dynamics and equity issues in a study of factors which influence implementation of full spectrum contraceptive care. Geronimus (2003) studied culture, identity, privilege and teenage childbearing in the United States and notes “entrenched cultural interdependence and social inequality sets the stage for well-meaning people to perpetuate cultural dominance by maintaining the core values, competencies and privileges of the dominant group” (Geronimus, 2003, p. 649). This necessitates deeper exploration into barriers which influence implementation of LARC methods, including entrenched biases and power dynamics.

A critical feminist praxis explores issues of power and oppression to challenge dominant ideologies and discourses which is necessary given the history of reproductive injustice and current equity issues which exist (Bernal & Aleman, 2017). By taking into consideration how systems of power and
oppression interact, this praxis acknowledges the importance of not just focusing on gendered power and oppression but includes the intersectionality of systemic racism, class systems, and marginalized groups (Verjee, 2012).

In addition to CFT, Gonzales, Kanhai, and Hall (2018) reframed organizational theory through a critical paradigm lens in order to address issues such as intersectional and reparative justice (Gonzales, Kanhai, & Hall, 2018). Intersectional justice, or acknowledging that individuals may experience multiple injustices at the same time, may uncover subtle nuances which effect organizational decision making and prioritizing since as previously noted, gender, racism and classicism often intersect to marginalize women and create barriers to effective reproductive health care.

Assumptions

This study included the following assumptions: (1) the selected study participants will respond to interview questions candidly and truthfully; (2) reproductive health care should be distributed equitably regardless of socio-economic status, race, ethnicity, gender or age; (3) Lack of effective contraception and the subsequent unplanned pregnancies have a negative impact on a macro-level with economic and societal consequences; and on a micro-level with personal implications for marginalized populations and with regard to the perpetuation of oppression.
Limitations

A limitation of this study was the exclusion of students.

Delimitations

This study’s main purpose was to explore factors that influence the implementation of full-spectrum contraception in a student health center. It was not intended to evaluate the institution, the student health center, the services the student health center provides or the providers in the student health center.

Definitions of Key Terms

For the purpose of this study, full-spectrum contraception was defined as all methods of contraception including but not limited to short-acting methods such as the oral contraceptive pill, patch, ring and condoms and long-acting contraceptive methods such as intrauterine contraception (IUC) and contraceptive implants.

Summary

This case study intended to explore the factors that influence the implementation of full-spectrum contraceptive care in the student health center at Comprehensive University (CU).

In this introductory chapter, I provided an overview of the problem of inequitable access to full-spectrum contraception and unplanned pregnancy in the United States. The impact of unplanned pregnancy on college students in the
United States was discussed. Barriers to the most effective contraceptive methods such as Long-Acting Reversible Contraception (LARCs) were explained. Reproductive equity issues were addressed regarding barriers to effective LARC methods in marginalized populations. In addition, the role of student health centers in decreasing barriers to effective contraception for our most vulnerable populations was considered. Gaps in the literature regarding the provision of effective contraception in student health centers were addressed. Lastly, I reviewed the above problem through a critical lens using Critical Organizational Theory and Critical Feminist Theory in order to uncover qualitative, embedded, institutionalized factors which may influence the implementation of full-spectrum contraceptive care in a student health center. In the following chapter, literature related to unplanned pregnancy, barriers to effective contraception, reproductive health inequities, and solutions to the above problems are reviewed.
CHAPTER TWO
LITERATURE REVIEW

Introduction

In this chapter, literature is reviewed related to reproductive health inequities and unplanned pregnancy in the United States. Reproductive health access and barriers to effective contraception will be explored and the impact of unplanned pregnancy in the United States from an economic and public health perspective will be examined. Unplanned pregnancy consequences for college students will be considered since the typical college-age of 18 to 24 years old are the demographic with the highest unplanned pregnancy rates. Next, solutions and barriers to unplanned pregnancy will be reviewed, including the most and least effective methods of contraception. Utilization of higher education student health centers as a potential solution to increasing access to effective contraception, thereby reducing unplanned pregnancy rates for our highest risk populations will be considered. Reproductive health within the context of the history of reproductive injustice in the United States, followed by current reproductive disparities will be examined. Finally, I will review reproductive health as an equity issue through a Critical Feminist Theory Lens and a Critical Organizational Theory Lens.
Unplanned Pregnancy in the United States

Unplanned pregnancy remains a significant problem in the United States with far-reaching consequences for society. The Center for Disease Control and Prevention (CDC) defines pregnancy as unintended or unplanned if it is either mistimed, meaning the pregnancy occurred earlier than desired or unwanted, meaning no children were desired at the time of the pregnancy (Center for Disease Control and Prevention, 2016). Nearly half of the pregnancies in the United States are unplanned. Most unintended pregnancies are due to contraceptive failure attributed to inconsistent or incorrect use of contraception. The highest rates of unintended pregnancy occur in the 20 to 24-year-old age group, followed by the 18 to 19-year-old age group. Nearly 70% of pregnancies in unmarried women between 20-29 years of age are unplanned (Finer, & Zolna, 2016; Winner et al., 2012).

Unplanned pregnancies are twice as likely to lack prenatal care (Guttmacher Institute, 2018). Women with unplanned pregnancies exhibit fewer healthy practices and experience more depressive symptoms during their pregnancies. Yankikerem, Ay, and Piro (2013) explored the prevalence and characteristics of women with unplanned pregnancy (UP) and examined the association between pregnancy planning status, women’s health practices, and depression during pregnancy. A total of 550 pregnant women were surveyed, utilizing the Health Practices Questionnaire (HPQ II) and depression was measured with the Beck Depression Inventory (BDI). Women with unplanned
pregnancy had poorer health practices reflected in significantly lower HPQ scores than women with planned pregnancies. Women with unplanned pregnancy also suffered from more depression with a significantly higher score for BDI. Women whose pregnancies were planned were likely to be younger, more educated, employed, to perceive more social support, and to be more satisfied in marriage than women whose pregnancies were unplanned (Yanikkerem, Ay, & Piro, 2013).

In addition to public health issues, unplanned pregnancies have an economic cost. Trussell (2007) estimated direct medical costs of unintended pregnancy in the United States were 5.0 billion dollars in 2006. These costs were estimated by studying the literature and calculating the direct medical cost of births, fetal losses, and induced abortions. Data were obtained from the 2002 National Survey of Family Growth (NSFG) and a 2002 survey of abortion providers from the Guttmacher Institute. Results showed a cost of $3.924 billion for unintended births, $797 million for induced abortions, and $266 million for fetal losses (Trussell, 2007). These costs soared to $21 billion as of 2010. It is estimated that these costs would have been 75% higher without publicly funded family planning services (Sonfield & Kost, 2015).

College Students and Contraception

Unplanned pregnancies have significant ramifications for college students. The highest rates of unplanned pregnancy occur in the 18-24 year-demographic, which is the typical college age. According to the National Center for Educational
Statistics (NCES), in 2018, a projected 12.3 million college and university students will be under age 25, and the majority of students will be female (National Center for Educational Statistics, 2018). In the United States, one in 10 dropouts among female students at community colleges are attributed to unplanned pregnancy and 7 percent of dropouts among community college students overall. Over 60% of community college students who have children drop out of school, which is 65% higher than for women who do not have children during their community college tenure (Bradburn, 2002). A more recent study from Child Trends (2010) estimates that 6% of community college students have children while enrolled, and approximately half of those students drop out (Child Trends Inc. 2010).

Despite high pregnancy rates, prevention of unplanned pregnancy is of paramount importance to college students. A survey of 3,869 community college students conducted by the American Association of Community Colleges (AACC) and the National Campaign to Prevent Teen Pregnancy showed that three-quarters of students report preventing unplanned pregnancy is very important to them and eight in ten say that having a child while still in school would make it harder to accomplish their goals (Prentice, Storin, & Robinson, 2012).

Lack of evidence-based reproductive health information and misinformation is a barrier to effective contraception in this age group. The National Campaign to Prevent Teen and Unplanned Pregnancy (2015) reports "94% of unmarried young adults, 18-29 say they have all the information they
need to avoid having or causing an unplanned pregnancy, but 11% say they know little or nothing about condoms, 40% say they know little or nothing about birth control pills, and 71% say they know little or nothing about intrauterine contraception" (p.2).

Although pregnancy prevention remains an important goal for individuals, effective methods of contraception remain underutilized in the United States. Less effective methods such as oral contraceptive pills and male condoms remain the two most popular methods of contraception while less than 3% of women in the United States utilize the more effective LARC methods (Bharadwaj, 2012; Secura, Allsworth, Madden, Mullersman & Peipert, 2010). Non-use and misuse of less effective contraception such as condoms and oral contraceptive pills are the most important contributing factor to unplanned pregnancy (Gilliam, Neustadt, Whitaker, & Kozsloski, 2011).

Siegel, Klein, and Roghmann (1999) surveyed a convenience sample of 797 college freshmen, sophomores, juniors, and seniors regarding their sexual behavior and found condom use to be the most popular method of contraception (70%) across all four years with oral contraceptives the second most popular choice (37%). Other methods of contraception were underutilized, with only spermicides exceeding 1%. Findings showed an increased level of oral contraceptive use among partners reported by seniors as compared to freshmen, without a corresponding increase in condom use. Also noted was increased reliance on women to provide contraception among seniors as compared to
freshman. Recommendations included addressing differences in sexual behavior between different cohort years in university and college-based health programs. A limitation of this study was the use of a convenience sample rather than a random or more systematic recruitment method which may decrease the generalizability of the findings (Siegel, Klein, & Roghmann, 1999).

In addition to using less effective methods of contraception, college students use these methods inconsistently, leading to lower efficacy rates. Sutton and Walsh-Buhi (2017) studied variables and differences across socioeconomic status (SES) and studied inconsistent contraceptive use among college women. A nonprobability sample of 515 female college students completed an internet survey between November 2014 and February 2015. Results showed only 46.8% of women used contraception consistently and had only moderate levels of knowledge about contraception. The authors recommended future research to understand specific sources of information young women are receiving (i.e., mothers, friends, and other family members) and how that influences their attitudes towards specific methods. This study further emphasized the need for college health professionals to acknowledge that college women have a variety of information sources available to them (Sutton & Walsh-Buhi, 2017).

High rates of unintended pregnancy due to the utilization of ineffective contraception are also reflected by the use of Emergency Contraception (EC). Women utilize EC after non-use or misuse of a contraceptive method, thus putting them at high risk for unintended pregnancy. Royer, Turok, Sanders, and
Saltzman (2016) conducted a prospective observational study of 548 women and found that women presenting for Emergency Contraception (EC) state a high desire to prevent pregnancy regardless of the method selected. Half of the women, when considering a hypothetical pregnancy, had a plan for how they would respond to an unplanned pregnancy, but when confronted with an actual pregnancy, half altered their plan (Royer, Turok, Sanders, & Saltzman, 2016).

Another study confirms the use of ineffective contraception and risky reproductive health behaviors in college students. Trieu, Bratton, and Hopp (2011) explored sexual and reproductive health behaviors of 4,487 students from 13 community college campuses in California utilizing the American College Health Association’s National College Health Assessment (ACHA-NCHA), a nationally recognized survey instrument used to assess a broad spectrum of health needs, behaviors, and perceptions of college students. In their study, condoms were the most common method of birth control (49.7%), followed by oral contraceptive pills (46.1%). Over 20% of sexually active students reported using emergency contraception with high rates of unintended pregnancy. Their findings reflect higher rates of risky sexual behaviors, unintended pregnancy, emergency contraception, and sexually transmitted diseases, and lower rates of human immunodeficiency virus (HIV) testing in the community college population as compared to the overall ACHA-NCHA reference group and emphasized the need for family planning services on campus (Trieu, Bratton, & Hopp, 2011).
Long-Acting Reversible Methods of Contraception

Studies have shown Long-Acting Reversible Contraceptive (LARC) methods to be 20 times more effective than the more popular short-acting methods such as the pill, patch, ring, injection, and condoms (Birgisson, Shao, Secura, Madden, & Peipert, 2015). The Contraceptive CHOICE Project, a large prospective cohort study with 7,486 participants, was designed to promote the use of long-acting reversible contraceptive (LARC) methods as a means of reducing unintended pregnancies by providing reversible contraception of choice at no cost. Results found that the effectiveness of long-acting reversible contraception is superior to that of contraceptive pills, patch, or ring and is not altered in adolescents and young women. The contraceptive failure rate among participants using pills, patch, or ring was 4.55 per 100 participant-years as compared with 0.27 among participants using long-acting reversible contraception such as the contraceptive implant or IUC. Among participants under 21 years of age who used pills, patch or ring, the risk of unintended pregnancy was almost twice as high versus participants 21 years or older (Birgisson, Shao, Secura, Madden, & Peipert, 2015; Winner et al., 2012). Although we have strong, evidence-based research noting that LARC methods can reduce unintended pregnancy in college students, as previously noted, less effective methods continue to be the most prevalent in student health centers (Sutton & Walsh-Buhi, 2017).
Misinformation and myths regarding contraception persist which contribute to underutilization of effective methods. In the 1970s through the 1990s, Intrauterine contraception (IUC) was often viewed as risky and could not be used in women who had not previously had children (nulliparous). Current IUC has changed considerably, some devices developed and marketed specifically for women who have not had children (nulliparous). The American College of Obstetrics and Gynecologists and the American Academy of Pediatrics (2014) recommended LARCs, including IUCs and implants as first tiered methods for the traditional college-age group of 18-24-year-olds and younger. Recommendations included a tiered approach to contraceptive counseling, whereby the most effective options are presented before less effective options and all options that can be safely used by the patient should be offered, regardless of whether a method is available on site (American College of Obstetricians and Gynecologists. ACOG, 2018; American Association of Pediatrics, 2014).

When evidence-based, tiered contraception counseling is utilized, and LARCs are offered on-site to women who can safely use them, LARC utilization, continuation, and satisfaction rates are high. Diedrich, Madden, Zhao, and Peipert (2015) conducted a prospective cohort study of 460 women who received an IUD through the CHOICE project. Randomly selected women who had IUDs inserted between January 2008 and June 2009 were contacted by telephone and asked whether they were still using their IUD. Women who reported
discontinuation of the IUD were asked for the reasons and subsequent contraceptive use. A total of 321 (70%) of the 460 women were reached for interviews. Results showed that IUD continuation remains high (>60%) at 48 months with no difference between types of IUDs chosen. The authors stated that a limitation of this study might be the sample size which may not have sufficient power to look at multiple sub-groups and sociodemographic factors associated with discontinuation (Diedrich et al., 2015). Although the provision of LARC methods can be a solution to unplanned pregnancy, there remain significant barriers to implementation of contraception in student health centers which impede access.

Barriers to Effective Contraception in the United States

Lack of adequately trained primary care providers willing to provide the most effective methods of contraception impedes access to effective contraception for many women. Nisen, Peterson, Cochrane, and Rubin (2016) found that only a minority of family physicians regularly provided implants and intrauterine devices (IUD). A secondary analysis of data with 2,329 family physicians in 2014 was reviewed to establish a cross-sectional national picture of IUD and contraceptive implant provision by US family physicians. Of their respondents, 19.7% inserted IUD’s and 11.3% inserted and removed implants regularly in their practices (Nisen et al., 2016). This gap suggests increased, and early training for healthcare providers in the provision of LARCs may have a significant impact on access to reproductive care.
Providers with inadequate training in effective methods of contraception may only offer the less effective methods of condoms and oral contraceptive pills (OCP), which contributes to high unplanned pregnancy rates. Weisberg, Bateson, McGeechan, and Mohapatra, (2014) studied 200 IUD users and 149 contraceptive implant users, 18 years and older were studied for three years to determine the characteristics of users and factors that influenced women to choose either a subdermal implant or progestin releasing IUC. Participants completed a questionnaire regarding their contraceptive choice at 6, 12, 24, and 36 months by telephone or online about bleeding patterns, side effects, satisfaction, and reasons for continuation. The authors found that two-thirds of women did not have LARCs offered to them at their reproductive health visit and had to initiate the conversation about a LARC with their providers. Patients were more likely to hear about LARC’s from family and friends. Early discontinuation rates due to unacceptable bleeding highlighted the need for thorough pre-insertion counseling (Weisberg et al., 2014). Lack of evidence-based contraceptive counseling decreases the satisfaction and utilization of LARC methods, which remains a significant barrier to effective contraception.

History of Reproductive Health in the United States

Gordon (1974) notes that reproductive health inequities and limiting reproductive options to oppress marginalized groups by dominant society is not new, and eugenics and imperialism were closely related in American and English history. Social policies of limiting birth throughout a society or in certain groups
for the purpose of changing economic, ecological and political decisions were common the United States in the late 1800s and early 1900s (Gordon, 1974).

Abortion and reproductive rights did not become politicized or outlawed until the late 1800s. At that time, the newly formed American Medical Association, comprised of white males, professionalized medicine and restricted the predominantly female midwives, herbalists, and healers who provided the reproductive health care. The Comstock Act, passed in 1873, made it illegal to send anything related to contraception or abortion through the mail. Forty states passed anti-abortion laws between 1860 and 1880. By 1899, contraceptives and abortion were illegal nationwide, effectively wrestling control from women over their own fertility and placing these decisions in the white, male domain. Emma Goldman and Margaret Sanger defied these laws, pioneering the early birth control movement, which championed individual choice and reproductive self-determination and was the precursor to today's Planned Parenthood organization (Gordon, 1974).

In the late 1800s early 1900s, eugenics and the notion of promoting racial superiority by population control flourished. Thirty states adopted eugenic sterilization laws which together accounted for the forced sterilization of approximately 60,000 institutionalized, marginalized Americans. Often these subjects were deemed less desirable or genetically inferior by the dominant white male patriarchy. As a result of the above injustices, the Nuremberg Code was formulated in 1947 to provide guidelines and policies aimed at protecting the
welfare of subjects. Current research guidelines regarding informed consent and institutional review boards continue to guide our research today to prevent prior mistakes (Norrgard, 2008). Acknowledgment and reflection on the power struggles, prejudices, and biases which informed previous reproductive health injustice in our society are essential in order to transform the future and understand the current barriers we have to achieve reproductive equity today.

Reproductive Healthcare Disparities Today

The fact that unintended pregnancy rates in the United States are highest in our youngest, most vulnerable and marginalized populations illustrates the healthcare disparities which still exist in our society. Finer and Zolna (2016) studied the incidence and disparities of unintended pregnancy in the United States by reviewing data from the National Survey of Family Growth (NSFG), National Center for Health Statistics, and population data from the U.S. Census Bureau. Their findings highlighted disparities in unintended pregnancy rates among subgroups, specifically with women 18-24 years old, poor, or cohabitating. Results showed a strong inverse relationship between income and educational level and rates of pregnancy, meaning the lower the levels of education and income, the higher the rates of unintended pregnancy, contributing to unintended pregnancy rates two to three times the national average (Finer & Zolna, 2016).

Race is a contributing factor to reproductive health inequity. Women of Latina descent are three times more likely to experience an unintended
pregnancy than Caucasian women (Finer & Henshaw, 2006). Latina women are more likely to lack evidence-based information on reproductive health, which may contribute to the higher rate of unintended pregnancy in this subgroup. Venkat, Mach, Ng, Cemer, and Richman (2008), studied knowledge and beliefs about contraception in urban Latina women and found that Latina women lacked evidence-based information on reproductive health. The study aimed to identify perceptions Latina women had about four different contraceptive methods (birth control pill, patch, injection, intrauterine contraception) and to investigate whether religiosity and acculturation play a role in their contraceptive choice. An observational cross-sectional study was conducted with women in an outpatient clinic. Data were collected over four weeks. A total of 288 women were surveyed with a questionnaire regarding demographics, acculturation, and beliefs about two out of four methods of birth control (pill, patch, shot, or IUC). An Analysis of Variance (ANOVA) with multiple comparisons was run on the mean score of each method to determine significance between scores. The study found that Latina women were concerned about the safety of Oral Contraceptive Pills (OCP) and the contraceptive injection (DMPA). Lacking evidence-based information, participants were uncertain about the contraceptive patch and IUC's. Latinas also demonstrated more negative beliefs about the side effects of OCP’s and the contraceptive injection (DMPA) and were concerned about weight gain, method reversibility, and bleeding (Venkat, Mach, Ng, Cemer, & Richman, 2008). This supports the theory that racial inequity in the dissemination of evidence-based
reproductive health information contributes to high unplanned pregnancy rates in marginalized populations.

Buhi, Marhefka, and Hoban (2010) studied sexual health disparities between blacks and whites in a sample of US college students. Data were analyzed from 44,165 non-married undergraduate students, aged 18-24. Secondary data were obtained from the 2007 American College Health Association-National College Health Assessment. Results again showed the need for theory-driven, targeted sexual health promotion interventions. The study highlighted a need to increase access to hormonal contraceptives and early STI screening/treatment among black students, improve HIV testing among white students, and increase condom promotion for all students (Buhi, Marhefka, & Hoban, 2010).

Age and race impact access to evidence-based reproductive health information and effective contraception. Gottschalk and Ortayli (2014), reviewed the literature to identify and evaluate the existing evidence-based contraceptive services and interventions for adolescents in low- and middle-income countries (LMICs) that report on contraceptive behavior outcomes. Some common elements used by programs that impact adolescent contraceptive behaviors included school-based sexual education, adolescent-friendly services, peer education, multimedia, and community engagement. Their study found few interventions reach the young (under 18 years of age), the out of school, and other vulnerable groups of adolescents. A limitation of any literature review,
including this one, is the dependence on the quality of the studies included. The studies in this review were all low and medium quality design; therefore, significant changes cannot be attributed to the intervention, only acknowledged (Gottschalk & Ortayli, 2014).

Negative attitudes and limited knowledge regarding reproductive health is documented as a barrier by Hoopes et al. (2016) who conducted a cross-sectional study of 102 female patients to evaluate knowledge and acceptability of LARC methods among adolescent women at a school-based health center (SBHC). Their study was unique in that it sampled from a general pediatric population attending a SBHC, rather than patients specifically seeking sexual and reproductive health care services. Their findings indicate a key strategy to reduce unintended pregnancies is to expand access to LARC services through school-based health and other primary care settings and provide evidence-based education to address limited knowledge and negative attitudes about LARC methods (Hoopes et al., 2016).

Providers' bias can impact decisions regarding which contraception options are offered to patients. Higgins, Kramer, and Ryder (2016) studied patients' perception of provider bias in LARC promotion and removal. Fifty women who had any history of contraceptive use were studied utilizing focus groups or interviews. Although a majority of respondents viewed their healthcare providers as a trusted source of information regarding contraception, a minority of participants were reluctant to trust their providers regarding LARC
recommendations. These women were disproportionately women of color. Some women reported that their preferences were undervalued by providers and providers' preferences for certain methods, sometimes outweighed their contraceptive preferences. In one instance, a participant was pressured into using a Nuva Ring when she wanted an IUD (Higgins et al., 2016). This supports the need for further research exploring providers bias to reproductive health care and other factors which influence the implementation of LARC methods.

Gilmore (2015) studied barriers and facilitators to implementation of LARCs within Seattle school-based health centers (SBHC) and confirmed that providers' negative attitudes about LARC methods are a barrier. Semi-structured interviews with 14 key informants involved with the implementation of LARC services were conducted. Key informants included SBHC clinicians and administrators. The most cited barriers to providing LARCs were perceived lack of provider procedural skills and negative attitudes and bias about LARC methods. Logistics and technological barriers to implementation were also cited as barriers to implementation of LARC services in SBHCs (Gilmore et al., 2015). The above studies demonstrate the need to increase education for providers in best practices for counseling and provision of LARC services. This critical issue needs to be addressed if we are to increase access to effective contraception. Although the SBHCs in this study were not situated in higher education institutions, their findings can still be applicable and illustrate a need for further study in university SBHCs.
Solutions to the Problem

The high unintended pregnancy rate in the United States could be ameliorated by increasing the use of effective contraception methods. Birgisson, Zhao, Secura, Madden and Peipert (2015), reviewed the Contraceptive CHOICE Project, a prospective cohort study of over 9,000 women, 14-45 years of age in the St. Louis area, who received tiered contraceptive counseling to increase awareness of all reversible contraceptive methods available, particularly long-acting, reversible contraceptive (LARC) methods. Participants were provided with their contraception of choice at no cost for 2-3 years. Contraceptive method choice, continuation, and population outcomes of repeat abortion and teen pregnancy were studied. Results confirmed that LARC methods were found to be 20 times more effective than non-LARC methods and removing barriers to effective contraception reduced pregnancy, birth and abortion compared with national rates (Birgisson, Shao, Secura, Madden, & Peipert, 2015).

LARC usage has increased across all population groups in the last ten years; however, the groups at highest risk for unplanned pregnancy have not changed their contraceptive choices significantly. Kavanaugh and Jerman (2018) studied trends in contraceptive use in females in the United States between the ages of 18-44 between 2008 and 2014 and found a significant increase in the use of LARC's from 6% to 14% across all population groups. The study compared three rounds of the National Survey of Family Growth using samples of 12,279 (2008), 5,601(2012) and 5,699 (2014) by using simple and multivariate
logistic regression analysis. The most significant decrease was in sterilization, from 37% to 27% (Kavanaugh & Jerman, 2018).

Easy access to LARC's is essential since short-acting reversible methods of contraception such as the pill, patch, vaginal ring, and contraceptive injection are easier to discontinue, thus contributing to their lower efficacy rates. Bharadwaj, Akintomide, Brima, Copas, and D'Souza, (2012) surveyed 194 women under 22 years of age in a North London clinic which delivered free sexual and reproductive health services in order to identify reasons of acceptance or rejection of LARC's. Results found that women often try two or more methods of contraception before finding the one that suits them best (Bharadwaj, Akintomide, Brima, Copas, & D'Souza, 2012). This study builds on previous studies supporting the use of LARC's to decrease unplanned pregnancy (Birgisson et al., 2015) by confirming that switching between ineffective birth control is a contributing factor to high unintended pregnancy rates. Providing high-quality, evidence-based contraceptive counseling and increasing access to LARC's to deter switching between less effective methods should be encouraged to decrease unplanned pregnancies (Birgisson et al., 2015).

As previously noted, LARC's have been shown to have high satisfaction, and continuation rates in college-aged women (18-24) when patients have access to these methods and evidence-based reproductive counseling is provided (Birgisson et al., 2015; Winner et al., 2012). Adding to this body of knowledge, Ersek, Brunner Huber, Thompson, and Warrant-Findlow (2011)
examined the data from 172 college women, aged 18-36 years of age and found that women using non-coital dependent methods such as LARCs were 91% less likely to have discontinued their method compared to women who used coital dependent methods such as condoms and withdrawal. They examined the association between contraceptive method and satisfaction and discontinuation in a large public university. Logistic regression was used to model the association between current type of contraceptive method and satisfaction as well as the previous type of contraceptive method used and discontinuation of that method (Ersek, Brunner Huber, Thompson, & Warrant-Findlow, 2011).

As previously noted, having a primary care provider trained in LARC methods can increase the odds of LARC usage for adolescents. Bodurtha Smith, Harney, Singh, and Gupta Hurwitz (2017) confirmed this by conducting a cross-sectional study of 5363 women ages 15-21 years of age, in a large health system in Massachusetts to explore provider and clinic characteristics associated with LARC usage in adolescents. Their study found that having a primary care provider with LARC training in their residency training program increased the odds of LARC usage among adolescents. Educating providers about the appropriate use of LARC methods in nulliparous adolescents may increase access to care and facilitate LARC usage among underserved populations (Bodurtha Smith, Harney, Singh, & Gupta Hurwitz, 2017).
Provision of Contraception in Student Health Centers

Whitt (2005) notes that the role of student affairs in creating conditions that enhance student learning and support students in achieving their educational goals is vital. Student affairs, including SHCs, play an integral role in this endeavor by increasing access to effective contraception (Logan et al., 2018; Minguez, Santelli, Gibson, Orr, & Samant, 2015; Whitt, 2005).

Increasing timely graduation rates in higher education institutions has become an important goal nationally. The Graduate Initiative 2025 is an example of one institution’s plan to implement this goal. The California State University (CSU) system, which serves over 400,000 students, has instituted the Graduate Initiative 2025 (GI 2025) in an effort to increase graduation rates and assure CSU students can achieve their educational goals in a timely manner (California State University, Office of the Chancellor, Retrieved March 1, 2019). Student well-being is a critical component of this initiative. CSU's Executive Order 943 which governs the provision of services in the CSU system reflects the vital role SHCs have and mandates the provision of family planning services, consistent with current medical practice as a required basic student health service available in all CSU SHCs (Office of the Chancellor, 2005).

By providing the most effective methods of contraception on-site, student health centers can make a significant contribution to student well-being (Logan et al., 2018; Minguez et al., 2015). As these studies have shown, helping students to plan their pregnancies and prevent unplanned pregnancy can help ensure
student success and completion. Despite these findings, fewer than half of the student health centers on the 22 campuses of the CSU system provide full-spectrum contraceptive care on-site. Targeting reproductive health care in college, usually at the beginning of a woman’s reproductive cycle, makes sense since the highest rates of unintended pregnancy persist in the 18 to 24-year-old group, with the added benefit of improving access for our most vulnerable age group.

Student health centers have been utilized to provide contraception in middle schools and high schools with success. Minguez, Santelli, Gibson, and Orr (2015), examined improving access to reproductive health care services and contraception by providing care at student health care centers (SHC). Utilizing a quasi-experimental research design, their study researched reproductive health indicators among students at four urban high schools (1,365) with a SHC and compared them with students (711) in schools without a SHC in 2009. Results found that students with access to comprehensive reproductive services in a SHC were more likely to use hormonal contraception and showed greater exposure to evidence-based reproductive health education and counseling. The SHC provided comprehensive reproductive health education and services, including the onsite provision of hormonal contraception (Minguez et al., 2015). Success with providing contraception in school-based health centers for middle schools and high schools can translate into success for higher education SHCs as noted by (Ersek et al., 2011; Prentice, Storin, & Robinson, 2012).
Further building on this body of knowledge, Logan, Thompson, Vamos, Griner, Vasquez-Otero, and Daley (2018) studied trends in LARC usage among college women ages 18-24 years from 2008 to 2013. Contraception usage among 92,578 college women (18-24 years) was studied by analyzing data from the National College Health Assessment-II fall 2008-2013 surveys. Although LARC usage doubled within that time period, it still accounted for less than 5% of contraception in this demographic. Only half the women reported using any contraception at the time of last vaginal sex, 35% reported using a short-acting reversible method, 33% reported using a condom, and 20% reported "other" such as withdrawal or other natural method confirming Trieu's (2011) findings that often less effective methods are utilized by college students (Trieu, 2011). Although their study added to the gap in information regarding the provision of LARCs in SHC's, they noted their study lacked generalizability to all higher education institutions and recommended further study regarding barriers to LARC information and access in student health centers (Logan et al., 2018).

As previous studies have shown, misinformation regarding effective contraception can be a barrier to effective contraception (Hoopes et al., 2016; Sutton & Walsh-Buhi, 2017; Weisberg, Bateson, McGeechan, & Mohapatra, 2014; The National Campaign to Prevent Teen and Unplanned Pregnancy, 2015). Traditional college-age students between the ages of 18 and 24 are more likely to obtain their information regarding contraception from different sources than older demographics. Innovative marketing and outreach programs should
be utilized in order to target this patient population. Walsh-Buhi et al. (2016) performed a pilot study utilizing text and mobile video-based patient education for college students on LARC's. Participants included undergraduate students attending a large urban US university between September and November 2011. Using descriptive statistics, data were summarized from daily text-in analytics and web-based survey responses. Eighty-eight percent of their participants would recommend these methods to others. Findings indicate utilization of smartphones for mobile text- and video-based patient information is feasible and appropriate to disseminate evidence-based information tailored to this unique age group (Walsh-Buhi et al., 2016).

Most college-age women feel that contraceptive responsibility should be shared between partners; however, a much smaller percentage felt this was true in their relationships. Brunner Huber and Ersek (2011) studied perceptions of contraceptive responsibility among female college students. This exploratory study consisted of web-based or mailed questionnaires completed by 326 students from 2006-2007. Logistic regression was used to obtain odds ratios and a 95% confidence interval to model the associations between select demographics and lifestyle characteristics and contraceptive responsibility (shared vs. individual responsibility). Results showed a discrepancy between what women felt versus what happens. Most (89.1%) of the women felt that contraceptive responsibility should be shared between partners; however, a much smaller percentage (51.8%) felt that this responsibility was shared in their
relationships (Brunner Huber & Ersek, 2011). Higher education reproductive services should target all genders since unplanned pregnancy can affect everyone. Increasing the knowledge level for everyone regarding unplanned pregnancy and reproductive health options can be beneficial. Faculty, staff, and students who may not feel they are at risk for an unplanned pregnancy may still have meaningful conversations with family members or other students at risk. This underscores previous studies which recommend increasing evidence-based, tiered contraceptive counseling (Birgisson et al., 2015; Diedrich, Madden, Zhao, & Peipert, 2015; Ersek et al., 2011).

Aggregate data on utilization of SHC services is limited regarding health trends of college students and utilization of services since most of the data collection is voluntary or relies on self-reporting. Data collection is skewed towards large, private institutions and may not be generalizable to all higher education SHCs (American College Health Association (ACHA) Benchmarking Committee, 2010; Grasgreen, 2013), underscoring the need for further research in this area.

Theoretical Framework

Access to effective reproductive health options should be available to everyone regardless of age, race, ethnicity, or socioeconomic status. Given the history of reproductive injustice in the United States and the current disparities which exist, we must consider power dynamics and equity issues in a study of factors which affect the implementation of full-spectrum contraceptive care.
Geronimus (2003) studied culture, identity, privilege and teenage childbearing in the United States and notes "entrenched cultural interdependence and social inequality sets the stage for well-meaning people to perpetuate cultural dominance by maintaining the core values, competencies and privileges of the dominant group" (Geronimus, 2003, p. 649). This necessitates more in-depth exploration into barriers which influence the implementation of LARC methods, including entrenched biases and power dynamics.

Medicine has emphasized large cohort, quantitative research such as the contraceptive CHOICE Project as the gold standard of evidence-based medicine (Birgisson et al., 2015), yet the evidence-based recommendations of these studies and the endorsement of AAP and ACOG to provide LARCs as first tiered methods college-aged women has not been sufficient to remove all the barriers to LARCs (American Academy of Pediatrics, 2014; American College of Obstetricians and Gynecologists, 2018). Given the history of eugenics and population control in our history and the current reproductive inequities which affect our marginalized populations, viewing reproductive health through a social justice, critical race, and critical organization theory lens may uncover qualitative factors which have gone unrecognized when viewed through a quantitative research lens (Bernal & Aleman, 2017; Gordon, 1974; Norrgard, 2008).

As noted previously, struggles for power between the dominant male patriarchy, and marginalized gender, ethnic, and socio-economic groups shaped the reproductive inequities present today (Gordon, 1974). Understanding how a
society organizes itself along the intersections of race, gender, class and other forms of social hierarchies can help inform our view of reproductive health inequities (Verjee, 2012).

Changing the CU culture from the standard of “horizontal equity or the belief that equal needs deserve equal educational resources to vertical equity, or the belief that those with greater needs should receive greater resources” (Dowd & Bensimon, 2015, p. 6).

A critical feminist praxis explores issues of power and oppression to challenge dominant ideologies and discourses, which is necessary given the history of reproductive injustice and current equity issues which exist (Bernal & Aleman, 2017). Traditionally, Critical Feminist Theory (CFT) has been utilized in the educational forum to uncover, explain, and transform educational inequities. By taking into consideration how systems of power and oppression interact, this praxis acknowledges the importance of not just focusing on gendered power and oppression but includes the intersectionality of systemic racism, class systems, and marginalized groups (Bernal & Aleman, 2017; Verjee, 2012).

The utilization of a non-traditional Critical Organizational Theory (COT) lens may further provide insight into imbedded institutional reproductive inequities. Although, traditional organizational theory recognized that “tacit but powerful norms, values, and traditions shape organizational decision-making an prioritizing” (p. 513), it did not make a connection to major contemporary concerns such as access, equity and social justice (Gonzales, Kanhai, & Hall,
2018). This may explain why robust, quantitative studies such as the Contraceptive CHOICE Project had limited impact on unplanned pregnancy rates in the United States. Gonzales, Kanhai, and Hall (2018) reframed organizational theory through a critical paradigm lens in order to address issues such as intersectional and reparative justice (Gonzales et al., 2018). Intersectional justice, or acknowledging that individuals may experience multiple injustices at the same time, may uncover subtle nuances which affect organizational decision making and prioritizing since as previously noted, gender, racism and classicism often intersect to marginalize women and create barriers to effective reproductive health care. Reparative justice seeks to correct these injustices and works towards transformation.

Weiler (2017) notes that resistance is usually informal, disorganized and apolitical but counter-hegemony implies a more critical theoretical understanding; thus, we will employ Critical Feminist Theory and Critical Organizational Theory frameworks to gain a more insightful, qualitative understanding of factors which influence the implementation of full-spectrum contraceptive care (Weiler, 2017).

Summary

Despite effective methods of contraception, almost half of the pregnancies in the United States remain unplanned. The fact that unintended pregnancy rates in the United States are highest in our youngest, most vulnerable and marginalized populations illustrates the healthcare disparities which still exist in our society. The highest rates of unintended pregnancy occur in traditional
college-age women between 18-24 years old. Student Health Centers can provide a vital role in increasing access to effective contraception. Targeting reproductive health care in college, usually at the beginning of a woman’s reproductive cycle, makes sense since with added benefit of improving access for our most vulnerable age group.

Studies have shown LARC methods to be 20 times more effective than the more popular short-acting methods such as the contraceptive pill, patch, ring injection, condoms, and withdrawal but patients are often only offered the less effective methods in student health centers. This study will explore the factors which affect implementation of full-spectrum contraceptive methods in a university-based student health center through a Critical Feminist Theory and a Critical Organizational Theory lens.

In this literature review, literature related to unplanned pregnancy, barriers to effective contraception, reproductive health inequities, solutions to the above problems and the role of student health center in decreasing reproductive health inequities were examined. In chapter three, the purpose of this study and guiding research questions will be restated. Furthermore, a description of the research design, setting, data collection methods, data analysis procedures, and strategies to ensure trustworthiness will be discussed. Finally, I examine my positionality and subjectivities concerning this study regarding the implementation of full-spectrum contraception, including Long-Acting Reversible Contraception (LARCs) in a university student health center.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

Introduction

In this chapter, the purpose of this study and guiding research questions are restated. Furthermore, a description of the research design, setting, data collection methods, data analysis procedures, and strategies to ensure trustworthiness are discussed. Finally, I examine my positionality and subjectivities concerning this study regarding the implementation of full-spectrum contraception, including Long-Acting Reversible Contraception (LARCs) in a university student health center.

Purpose

Large, prospective cohort studies such as The Contraceptive Choice Project have been conducted regarding safety, efficacy, satisfaction, and usage of LARC such as the Contraceptive Implant (Nexplanon) and Intrauterine Contraception (IUC). Results found the effectiveness of LARCs to be far superior to that of the pill, patch, or contraceptive ring. The study shows high utilization, satisfaction, and continuation rates for LARC methods if access and financial barriers are removed and evidence-based patient education is offered (Birgisson et al., 2015). Despite these findings, access and financial barriers remain, and less than 7 percent of women utilize the most effective methods of contraception in the United States (Winner et al., 2012).
Almost 45% of all the pregnancies in the United States are unplanned despite the availability of effective LARC methods of contraception (Centers for Disease Control and Prevention, 2019). The Centers for Disease Control and Prevention (CDC) defines a pregnancy as unintended if it is either mistimed or unwanted at the time of conception (Centers for Disease Control and Prevention, 2019). LARCs include all forms of long-acting reversible contraception (e.g., the contraceptive implant and intrauterine contraception). Studies have shown LARC methods to be 20 times more effective than the more popular short-acting methods such as the pill, patch, ring, injection, and condoms (Allsworth et al., 2010; Birgisson et al., 2015; Winner, et al., 2012).

Barriers to effective LARC methods exist at a higher rate with our young, poor, and non-white marginalized populations (Finer & Zolna, 2016). Most unintended pregnancies are due to contraceptive failure attributed to inconsistent or incorrect use of contraception. The highest rates of unintended pregnancy occur in the 20 to 24-year-old age group, followed by the 18 to 19-year-old age group (Finer, & Zolna, 2016; Winner et al., 2012). Unplanned pregnancies have a significant impact on the retention of college students. In the United States, one in 10 dropouts among female students at community colleges are attributed to unplanned pregnancy and seven percent of dropouts among community college students overall (Prentice et al., 2012). Carr et al. (2018) noted that although a large percentage of the 20 million college students in the US obtain
their contraception through student health centers, there is a gap in the literature regarding implementation of LARC services (Carr et al., 2018).

As noted above, quantitative research recommending increasing LARC access and availability for our most vulnerable populations exist; however, a myriad of barriers to effective LARC contraception remains for these patients (Birgisson et al., 2015). Therefore, the purpose of this case study was to explore the factors that affect the implementation of full-spectrum contraceptive care in a comprehensive, public, university student health center. I approached this study utilizing a critical organizational theory lens and a critical feminist theory lens to better understand barriers to effective contraception including institutional problems such as the role of embedded racism, classism and gender issues. Examining these barriers through a qualitative research lens provided further insight into reducing the barriers to effective contraception for the 20 million college students who obtain their contraception through student health centers (Carr et al., 2018).

Research Questions

As a reminder, the purpose of this case study was to explore the factors that influence the implementation of full-spectrum contraceptive care in a comprehensive, public, university student health center. The research questions guiding my study were:
1) How does a four-year public university student health center implement full spectrum contraceptive services for their student population?

2) What are the factors influencing the implementation of full-spectrum contraceptive care in a four-year, public, comprehensive university student health-center?

3) What role do the demographics (race, socio-economic status, gender) of a public, comprehensive university campus play in the provision of contraception in student health centers?

For the purposes of this study, full-spectrum contraceptive care included LARCs such as the Intrauterine Devices (IUC) and the Contraceptive Implant. Short-acting contraception included the contraceptive pill, patch, ring, injection, and condoms.

Research Design

Although many definitions of case study abound, Flyvbjerg (2011) notes the decisive factor in defining a study as a case study is the choice of an individual unit of study and the setting of its boundaries. In addition to many definitions, there are many approaches to a case study. According to Stake (2008), an intrinsic, single-case study is appropriate when studying an individual or single case will provide a rich description, analysis, and insight or a better understanding of a particular case. For this study, a single-case intrinsic study design was chosen as the best methodology since it will allow for an in-depth
examination of the factors which influence the implementation of contraceptive care within the bounded system of a student health center in a four-year, public, comprehensive university system (Flyvbjerg, 2011; Stake, 2008).

Research Setting

This study took place at Central University (a pseudonym). Central University is a public four-year comprehensive university. Central University (CU) is part of the Universal University System. The Universal University System educates over 400,000 students a year and is committed to advancing and assuring student wellbeing. Over 65% of Central University’s (CU) population are African American or Latino, and over 60% are female. In addition, over 65% of those who graduate from CU are the first in their families to do so, and over 60% receive Pell Grants indicating low socio-economic status. As noted previously, this demographic suffers disproportionately from a myriad of barriers to effective LARC contraception (Birgisson et al., 2015).

Participants

A combination of purposeful and snowball sampling was utilized (Mertens, 2015) to identify past and present administrative and clinical decision-makers at the university who were willing to participate in this study. Initially, staff was purposefully identified through the CU Student Health Center website. Participants were then contacted by email or telephone. Snowball sampling (Mertens, 2015) was then utilized to obtain access to other potential participants.
who were decision-makers regarding the implementation of contraception in the student health center or who were present at the time when LARCs were implemented in the clinic.

Yin (2016) notes that although there are no rules for sample size in qualitative inquiry, a complex topic may need to be covered by a smaller number of instances examined intensely (Yin, 2016). The Student Health Center website listed less than ten clinicians; however, not all of these clinicians provide contraceptive services, nor were all willing or available based on the response to initial emails. Therefore, six participants were interviewed including one administrator, three clinicians and two staff participants who have had various roles implementing full-spectrum contraceptive services in the Student Health Center.

Data Collection

Data was collected in the fall of 2019. I relied on three primary sources of evidence: semi-structured interviews, document analysis, and observations. I detail each method in the following subsections.

Interviews

Yin (2016) notes that qualitative research interviews should encourage two-way conversational interaction and intense listening on the researchers end in order to hear and understand the meaning of what the participants are saying; therefore, a strictly structured interview should be avoided. For these reasons, this study utilized semi-structured interviews with open-ended questions. This
encouraged participants to utilize their own words and closely reflected the participants’ perspective rather than the researcher (Yin, 2016). With this in mind, semi-structured interviews were conducted with decision-makers, including an administrator, three clinicians and two staff members regarding the implementation of full-spectrum contraceptive care in the Student Health Center. Opinion or value questions in the semi-structured interviews were used to explore convictions, judgments, and beliefs towards implementation of full-spectrum contraceptive care in the Student Health Center (Madison, 2012). Participants were asked a series of open-ended questions designed to gather rich responses and thick descriptions reflecting participants’ beliefs system including “values, attitudes, personal opinions, prejudices, morals and other interpretive perceptions of the social world” (Glesne, 2016, p. 298) in regard to providing full-spectrum contraception in the Student Health Center. Examining the belief systems, values, prejudices, morals, and attitudes of these various stakeholders uncovered embedded beliefs, which influence the implementation of full-spectrum contraception in the Student Health Center.

Participants had the option of selecting face-to-face interviews or telephone interviews. Two participants chose face-to-face interviews and four chose phone interviews. Time and location of the interview were mutually agreed upon. Semi-structured interviews lasted 30-45 minutes per research participant. After IRB approval, the informed consent and interview protocols were reviewed to underscore the purpose of the study and make sure
participants understood they could opt-out of the study at any time. See Appendix A for interview protocols.

**Documents**

I analyzed documents from multiple sources in an attempt to gain an understanding of how a student health center in a four-year, public, comprehensive university provides contraceptive care and what factors influence the implementation of full-spectrum contraceptive care within this setting. Document review can provide information regarding how the student health centers provide contraceptive care without interrupting student health center operations (Mertens, 2015). These documents included: 1) CU’s policy on the provision of contraception and reproductive health services and the Mission Statement for CU’s Student Health Center 2) Student health center patient education regarding contraceptive services, and 3) Student health center information regarding contraception on websites and social media sites. Table 3.1 further explains the rationale for each document and the analytical question that guided my analysis. Websites and Social Media were examined to see if evidence-based information was readily available for students. Conversely, a lack of evidence-based information on these sites represented a barrier to contraception.
Table 3.1. Rationale for Document Analysis

<table>
<thead>
<tr>
<th>Document</th>
<th>Rationale</th>
<th>Analytical Question</th>
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| Student Health Center Website and Social Media | • Access  
• Visibility  
• Values  
• Evidence-based information  
• Services | • What information is available on the website?  
• Is the information easily accessible to students and the community?  
• Is information regarding shc accessibility and contraception easy to find on website?  
• Does the website represent the demographics of the institution? |
| Student Health Center Patient Information | • Access  
• Visibility  
• Values  
• Evidence-based information | • What is the information available to students regarding contraception?  
• Is the information easily accessible?  
• Is the information evidence-based?  
• Is the information geared toward student demographic? |
| University and Student Health Center Mission Statement and Policy on Reproductive Health Services | • Institutional Values  
• Goals  
• Objectives  
• Alignment | • What is the mission of the University and the Student Health Center regarding contraception?  
• Do the student health center services offered align with institutional goals and mission? |
Observations

Glesne (2011) notes that a “main goal of observing is to better understand the setting, participants, and behaviors” (p.67). In this case, I conducted observations at Central University Student Health Center. I observed the website, educational materials, and physical areas accessible to students and the community to better understand factors that may influence the implementation of full-spectrum contraceptive care in the Student Health Center.

Observing a welcoming environment, evidence-based information, and knowledgeable staff would support their mission of providing high-quality health care and health education. Conversely, if these are missing, it could indicate a misalignment of the mission statement and provision of services and a barrier to contraceptive care. Merton (2015) notes that "observing what does not happen is important to document if certain things are expected" and in this case could represent a barrier to implementation of full-spectrum contraceptive care (p 381).

Lack of consistent, evidence-based, contraceptive information in patient rooms is indicative of a barrier to information needed for students to make informed decisions regarding contraception. Staff with limited understanding of contraceptive options and how to obtain services may give students erroneous information creating a barrier to care; therefore, staff knowledge of available contraceptive services, how to access care and availability of appointments will be observed. The physical environment of the patient rooms, procedure rooms,
and waiting areas will be described in detail with particular attention to contraceptive patient information and ease of access to care.

I functioned along the continuum of participant-observer, functioning as an observer at times but also as a participant since I am a member of the healthcare community (Glesne, 2016). Observations were viewed utilizing my experience as a nurse practitioner with over 20 years of experience in reproductive health care. My experiences, positionality, and biases will be more thoroughly examined in my positionality statement at the end of this chapter.

Data Analysis

Reviewing and reflecting on the data is a continual process which begins with initial data collection and continues with the subsequent rumination over data while theorizing possible relationships and meanings (Mertens, 2015). Research themes and questions will continue to develop as data are examined, and specific coding method decisions may happen during and after the initial review of data (Saldaña, 2016). Data collected through documents, observations, and interviews were analyzed, and coded to identify themes tied to Critical Feminist Theory and Critical Organizational Theory.

Data were examined concerning the research questions guiding this study. Specifically, the exploration of participant actions/processes and perceptions were examined through a Critical Feminist Theory (CFT) and a Critical Organizational Theory (COT) lens (Gonzales, 2018; Saldaña, 2016). The Atlas.ti, qualitative data analysis program was used to analyze the direct
language of the participants in data culled from the semi-structured interviews. Data from the multiple sources were analyzed using Saldana’s (2016) codes-to-theory model, which progresses from Data-->Code-->Category -->Themes/Concepts-->Assertions/Theory (Saldaña, 2016). This process was fluid and continually refined throughout the study; the basic process progressed from real data to abstract themes and concepts to assertions and theories noted in the following chapters.

Trustworthiness

I included multiple steps to ensure trustworthiness in this study. Triangulation was utilized by examining multiple data sources to search for convergence and build a coherent justification for themes (Glesne, 2016).

I maintained a fieldwork notebook to keep an audit trail of my data, fieldwork notes, and procedures. This allowed me to continually reflect on my subjectivities and positionality throughout this process (Glesne, 2016). A peer debriefer was utilized to question, critique, and provide feedback in order to enhance the quality of this study (Creswell, 2014). My peer debriefer was a trusted member of my dissertation committee, who has a background in public health and has served as the director of a university student health center.

As noted above, I continually and reflexively reviewed, clarified, and monitored any bias I brought to the study throughout this research process (Glesne, 2016). My positionality and subjectivities are discussed in the next section of this chapter.
Positionality of the Researcher

Beliefs, attitudes, and opinions shape my conscious and perhaps, more importantly, my unconscious and unintentional behaviors. These biases can influence the research process by altering the lens through which I filtered my data, the tone of voice I used in interviews, the wording of my questions and what I chose to see (Glesne, 2016). Reflecting on my positionality and acknowledging how I am personally implicated in reproducing race, class, and gender inequities is an essential step towards challenging structural inequities in health care systems (Noblit, Flores, & Murillo, 2004).

My position as a Nurse Practitioner and a graduate of UCLA, a large, respected research institution has implicitly positioned me to contribute to the reproduction of race, class, and gender inequities. I was educated to view medicine through a traditional positivist research paradigm which values empirical evidence and rejects introspective and intuitive knowledge. Positivists believe there is one orderly, structured truth with no loose qualitative ends (Sipe & Constable, 1996). Evidence-based medicine is defined through large, prospective, cohort quantitative research studies. Through these studies, I was taught the "right and wrong" way to practice medicine; however, the field of medicine remains mostly a white, privileged, institution. Medicine became politicized and legislated in the late 1800s by privileged, eurocentric males and is filtered through their dominant lens (Gordon, 1974). At that time, the newly formed American Medical Association professionalized medicine and restricted
the predominately female midwives, herbalists, and healers who provided health care (Gordon, 1974). As a female, Asian, healthcare provider, serving a predominantly, underserved patient population, I struggle between the values and structure of the medicine's traditional positivist paradigm and the shades of grey, qualitative factors which often influence the decisions patients and their healthcare providers make. My mind has been raised in black and white, but my heart understands the qualitative nature of grey. The poet Price (1996) seemed to understand this struggle in her poem Who Do I Represent when she wrote, “How do I strip myself of the excremental pomposity of my colonizer” (Frueh, 1996).

I grew up in New York City surrounded by different ethnicities but had not given much thought to equity issues in my young adult years. As a first-generation Vietnamese, in the 1960s, I was the "other." My mother was an independent, strong-willed woman who arrived in the United States in the 1950s on a Fulbright Fellowship. She was never afraid to stare down injustice and broke many barriers in her long career, personally and professionally. I grew up with two older sisters, so the female voice was dominant in our household, and my father and mother encouraged open dialogue. Strong women were the norm in my childhood. I attended Mount Saint Mary's College, an all-women Catholic, Hispanic Serving Institution. Again, strong women, multiple ethnicities, and open dialogue were encouraged and normal. The first conversation I remember regarding my privileged, comfortable, secure upbringing was with an African
American Registered Nurse I worked with, in the UCLA Pediatric ICU. She stated, "You know, if you grew up black, high school ski trips would not have been a part of your experience." We then had a conversation about which childhood experiences were different based on race. It had never occurred to me that ethnicity and race might define different childhood experiences.

I believe all women are entitled to effective contraception. I believe women have a right to reproductive choice. I believe contraception should empower women and lack of effective contraception disempowers and oppresses women. I believe in striving towards equity and empowerment for everyone. This is my entitled, naïve view of a privileged woman who grew up in a predominantly female, secure home. Earlier in my life, I assumed these were widely held beliefs and assumed that most people shared these common goals. My experiences personally and professionally with inequitable access to effective contraception has shown me that barriers exist which indicate different values and beliefs. I struggle with one foot in the positivist paradigm, continually, reflexively gaining awareness and shedding the dominant, colonist's narrative while accepting and practicing evidence-based medicine. My other foot realizes that reality is subjective and constructed based on power; therefore, I must examine reality through a Critical Theory Lens (Sipe & Constable, 1996). It is a delicate dance.

The Contraceptive Choice Project is a prospective, cohort study of over 7,000 patients regarding safety, efficacy, satisfaction, and usage of Long-Acting
Reversible Contraception (LARC) such as the Contraceptive Implant (Nexplanon) and Intrauterine Contraception (IUC). Results found the effectiveness of LARCs to be far superior to that of the pill, patch or contraceptive ring and is not altered in adolescents and young women. Among participants under 21 years of age who used pills patch or ring, the risk of unintended pregnancy was almost twice as high versus participants 21 years or older (Birgisson et al., 2015). The study shows high utilization, satisfaction, and continuation rates for LARC methods if access and financial barriers are removed and evidence-based patient education is offered. Despite this, access and financial barriers remain, and less than 7% of women utilize the most effective methods of contraception in the United States (Winner, et al., 2012). Throughout my career, I have been told by institutions why LARCs could not or should not be done. As a healthcare provider, I have been told not to provide more effective LARC methods to patients because of reimbursement issues. I have been told we should not offer LARC methods because of potential legal issues. I have been told I may offer LARC methods to my patients but must submit paperwork and wait for insurance authorization before providing these methods causing delays in care and additional visits for my patients. I have been denied reimbursement for LARC devices after placement because of insurance paperwork issues. I have been told that less effective oral contraceptive pills should be enough for my patients, and women should just take their pills if they do not want to get pregnant. As a patient, I have been offered less effective methods of contraception at no cost but told I must
pay up to $1000 for the more effective LARC methods. I have been offered less effective methods on the same day as my office visit but told I must return for at least two additional visits if I prefer a more effective LARC method. These experiences illustrate that different values and beliefs of politicians, administrators, insurance adjusters, and others in powerful positions have more control over access to effective contraception than the individual patient. My life experiences have changed my lens from a positivist to more of a critical theory lens.

As a primary care healthcare provider, I have had the privilege of forming relationships with patients and conversing about intimate topics not usually discussed in polite company. I work primarily with underserved populations. I learned to speak Spanish from my patients in county clinics and on mission trips to Mexico and Honduras. I hear about their struggles. I grow older with their families. I care for them coming into this world and leaving this world. I share their joys and their tears. I have watched patients struggle to save money to pay for their hospitalizations in cash before having a baby since they could not get health insurance. I have witnessed the difficult decisions of not being able to drive to the hospital to obtain healthcare because of lack of gas or dangerous bald tires. I have seen firsthand how unplanned pregnancy affects lives.

Almost 3,000,000 unplanned pregnancies occur in the United States despite the availability of effective LARC methods of contraception. Barriers to these methods exist at a higher rate with our young, poor, and non-white
marginalized populations (Finer & Zolna, 2016). I will always be an “other” as a healthcare provider, but I can never be a neutral observer. I represent women, mothers, daughters, sisters, patients. I cannot speak for my patients, but I can speak with them and leverage my position to advocate for them. We have the quantitative research recommending LARC access and availability for our most vulnerable population, yet a myriad of barriers remain for these patients (Birgisson et al., 2015). A critical theory lens examining the institutionalized racism, classism, and gender equity issues embedded in our institutions is necessary if barriers to implementation of LARC methods is to be thoroughly examined.

Limitations

A limitation was the exclusion of students in this study.

Summary

In this chapter, the purpose of this study and guiding research questions were restated. Furthermore, a description of the research design, setting, data collection methods, data analysis procedures, and strategies to ensure trustworthiness were discussed. Finally, I examined my positionality and subjectivities concerning this study regarding the implementation of full-spectrum contraception, including Long-Acting Reversible Contraception (LARCs) in a university student health center. In the next chapter, the results of my study will be presented.
CHAPTER FOUR

RESULTS

Introduction

In this chapter, I present the findings of the study. As previously stated, the purpose of this intrinsic case study was to explore the factors that influence the provision of full-spectrum contraceptive care in a comprehensive, public, university Student Health Center. Research questions guiding this study were: 1) How does a four-year public university Student Health Center implement full-spectrum contraceptive services for their student population? 2) What are the factors influencing the provision of full-spectrum contraceptive care in a four-year, public, comprehensive university Student Health Center? 3) In what ways, if any, do student demographics influence the provision of contraception in the Student Health Center? This topic is significant because unplanned pregnancies impact the retention of college students with the highest rates of unintended pregnancy occurring in the 18 to 24-year-old traditional college-age population (Prentice, Storin, & Robinson, 2012) and barriers to the most effective LARC methods exist at a higher rate with our young, poor, and non-white populations (Finer & Zolna, 2016), which is consistent with the demographic of the students served at CU. Furthermore, there is a gap in the literature regarding implementation of LARC services in Student Health Centers (Carr et al., 2018; Finer, & Zolna, 2016; Prentice et al., 2012; Winner et al., 2012). Findings in this study point to a disconnect between evidence-based (Winner, et al., 2012) best
clinical practice goals and how CU operationalized and implemented full-spectrum contraceptive care in a Student Health Center which contributes to the reproductive health inequities noted above. Thus, these findings are poised to make a significant contribution towards understanding the factors that influence the implementation of full-spectrum contraceptive care in populations which historically experience inequitable access to effective contraception.

The findings are organized according to four interrelated themes which are: 1) Essentialization of Students and the Influence on Operationalization of Student Health Services in Regard to Full-Spectrum Contraceptive Care, 2) Fear and Discomfort as Drivers of Decisions Regarding Full-Spectrum Contraceptive Care 3) Organizational Culture and Power Dynamics and their Influence on the Implementation of Full-Spectrum Contraceptive Care and 4) External Drivers of Decision Making in Regard to Full-Spectrum Contraceptive Care in a Student Health Center. Some sections have additional subthemes included under each theme.

The Essentialization of Students

As noted in previous chapters, quantitative research recommending increased LARC access and availability (Birgisson et al., 2015; Prentice et al., 2012; Winner, et al., 2012) is plentiful; however, a myriad of barriers to these most effective methods exist at a higher rate with our young, poor, non-white populations (Birgisson et al., 2015; Finer & Zolna, 2016). As a reminder, CU is a Hispanic Serving Institution (HSI) and over 65% of their student population is
non-white. In addition, over 60% of CU students are female, over 65% of those who graduate from CU are the first in their families to do so, and over 60% receive Pell Grants indicating a low socio-economic status. These demographics are consistent with the demographics described by participants in interviews. For example, Lennon noted, “So with this population, I think they’re mainly Hispanic…fairly young… it’s an underserved community. They’re very low income and they don’t have access to the services.” Similarly, Rene noted:

The demographics of our patient population are pretty much a reflection of the demographics of our area. So, it is primarily Hispanic. We're a Hispanic serving institution. The bulk of our students are Pell grant recipients…They're overcoming many obstacles to go to the university. Many of them have basic needs issues such as food insecurity, homelessness. Most are first-generation college students.

Juno further elaborated on the above information by stating:

So, our demographics here are unique. A lot of them are first time college students and a lot of them are students that are not as fortunate as students that might be attending other colleges. By that I mean, they have minimal resources to services such as health care or even obtaining food on daily basis.

Participants in the above conversations reflected a sensitivity to the needs of CU students and the recognition of a population that has been historically marginalized and suffered from reproductive health inequities. By reflecting on
the individual students instead of relying on numbers and statistics, participants put faces on the students and resisted essentializing and assuming what their needs are. Based on these conversations, participants observed that the students served in the health center were non-traditional with many diverse needs involving food insecurity, housing, transportation and healthcare. Recognition of the barriers to basic needs such as food, housing and healthcare should prompt a tailoring of services to these students, however, findings noted further in this chapter show a mismatch between operationalization of implementation of full-spectrum contraceptive services at the Student Health Center and serving the diverse student needs. Participants described multiple challenges for students regarding access to full-spectrum contraception such as time or transportation constraints as expressed by Rene:

So, many of our students encounter many challenges with things we take for granted. They have barriers such as transportation. They don't own a car. The majority of them are working and going to school so time is limited. They are going to school, have two jobs, they're working during the day, taking classes and they're working at night or studying.

Rene noted the needs of the students are things which are taken for granted by a more affluent population. Basic needs such as reliable transportation and the luxury of time are significant obstacles which create a different playing field regarding access to full-spectrum contraception, thus illustrating reproductive health equity issues.
Aiden further expanded on how the above barriers might impair the contraceptive choice of students if they did not have access to effective contraception at the Student Health Center by stating:

I think it would make it a lot more difficult for them (if the students couldn't access effective contraception in the Student Health Center). I think you'd also have probably a large portion of patients that, because it just didn't fit in with their life schedule, they would forego more effective methods. They'd probably forego their ideal method if it was something beyond a barrier method…a condom, which, condoms are effective, but there's high user error with that. So, I think overall…if they did not access care at the Student Health Center, they would choose less effective contraception or no contraception. There are some other options available such as Planned Parenthood, or their primary doctor's office, but I don't think it'd be as effective because as I said earlier, the health center is very accessible to students.

Aiden’s and other participants’ interviews stressed the importance of the Student Health Center’s unique role in providing access to full-spectrum contraceptive care for CU students. Acknowledging that students would choose less effective methods of contraception or not use contraception if the Student Health Center did not provide access to contraception shows how lack of access for CU student demographic translates into an reproductive health equity issue. In addition, recognition of the diverse student demographics of CU helps
differentiate between equal services and equity since equity does not mean providing the same resources and opportunities for all students. By acknowledging the diverse needs of the students, CU can better tailor full-spectrum contraceptive services. Conversely, not recognizing the needs of CU students and assuming or essentializing their needs contributes to reproductive health inequity. The above findings are insightful since, as previously noted, barriers to the most effective LARC methods exist at a higher rate with young, poor, non-white populations and most unintended pregnancies are due to contraceptive failure with the highest rates of unintended pregnancy occurring in the 20 to 24-year-old age group followed by the 18 to 19-year-old age group (Finer & Zolna, 2016; Winner et al., 2012).

Juno further expanded on how lack of access to healthcare remains a barrier to effective contraception for students by stating:

Our students here, our demographic, often don't have access to insurance elsewhere. So again, that could be because they don't have the resources or they're under their parent's insurance, which makes it difficult for students to walk into any or their office and ask for contraception.

Juno’s understanding of the barriers faced by specific students regarding healthcare access shows an understanding on a personal level of what makes access difficult for individual CU students. The ease with which other students access healthcare and specifically contraception is not a reality for the CU students described by participants. This expert view is necessary in order to
make administrative decisions to operationalize services tailored to the needs of students at CU. Lennon expanded on this further by stating:

I would say they are very inexperienced when it comes to healthcare and caring for themselves. I think a lot of it has to do with them not having health insurance growing up. They have not had very much experience with healthcare services in general. And then I think part of it has to do with their age. They're fairly young and I think mostly when they have utilized healthcare services, it's been with their parents who help handle all the visits for them. It's an underserved community. They're very low income and they don't have access to the services. People in more affluent communities, generally have access to health insurance or insurance coverage and access to services.

Lennon’s understanding that students have a low understanding of how to access the healthcare system and their own health is significant since ignoring this need perpetuates a barrier to full-spectrum contraceptive care which contributes to contraceptive failure rates due to inconsistent or incorrect use, again, pointing to reproductive equity issues. Lennon’s acknowledgement of the above barriers were echoed by Aiden and Tanner later in this chapter.

As previously noted, participants’ conversations reflected sensitivity and compassion regarding the struggles and barriers CU students faced when accessing full-spectrum contraception, however, the institutional operationalization of these services did not reflect these needs thus pointing to a
disconnect between students’ actual needs and how the institution provides services. CUs assumption or essentializing that students are from a more affluent community and have the knowledge required to access healthcare and health insurance contributes to the above disconnect. Tanner further expanded on how the above barrier impedes access to care by stating:

They've never established primary care, or they don't know how to use the words. They literally write it down and then they'll be on the phone, looking at me, asking what am I doing? … establishing primary care? And they'll be, "Oh yeah, I'd like to make an appointment so I can establish primary care."

Tanner’s statement points to a sensitivity needed in operationalizing and personalizing patient care services. Understanding that something viewed as simple, such as scheduling an appointment with a healthcare provider, is difficult for some CU students is needed in order to understand how to best implement access to full-spectrum contraceptive care. Tailoring patient education and marketing with this sensitivity to the needs and challenges of the diverse CU student population is essential since the needs of these students differ significantly from a student with regular access to healthcare from an early age or an older student who already has experience accessing the healthcare system. However, as noted further in the chapter, observations of the Student Health Center website, services and building were not tailored to encourage a healthcare naïve population access to care.
CU’s indifference to diverse student needs is not unique since, as Conrad and Gasman (2015) note “mainstream institutional models in higher education are often indifferent to the needs of a diverse society that includes students from a vast array of backgrounds and communities” (p. 20). Essentializing or assuming that the majority of students at CU are full-time, living on campus, working less than 20 hours a week, secure in their food, housing and healthcare needs, influences decisions regarding the implementation of full-spectrum contraception, thus perpetuating embedded social inequities. As reflected in participants’ interviews, students of today look vastly different from years past. For example, in 1960, over 78% of California higher education students were white, however, in 2015 less than 32% were white and over 68% were non-white (Legislative Analyst’s Office, 2017).

Despite these statistics, findings reflect an indifference to the above population, as shown by a mismatch between the goals of the institution and the operationalization of those goals in the Student Health Center. For example, a review of the university system’s institutional policy for university health services states that “basic services shall be available and shall include the provision of family planning services, consistent with current medical practice and health education (e.g. sexually transmitted infection, HIV, and preventative medicine) shall be included”. In addition, consistent with these institutional goals, the CU Student Health Center website emphasizes the “promotion of good health and wellness to keep students on the road to academic and professional success”.

65
Their mission statement states they “support students’ academic success” by providing “high quality accessible health care as well as health education and wellness services”. The phrases “shall be available”, and “providing high quality accessible health care” and “promotion of good health and wellness”, in the above statements, while laudable organizational goals, do not seem to be operationalized for the student demographic described by the participants as noted below.

A review of the Student Health Center website lists the hours as Monday through Thursday from 8:00 am to 5:00 pm and Friday from 9:00 am to 5:00 pm. These hours may not be the best way to provide access and make services available as reflected in participants’ statements such as, “if it just didn't fit in with their life schedule, they would forego more effective methods” and “they are going to school, have two jobs, they're working during the day, taking classes and they're working at night or studying”. Services sensitive to the above challenges might include extended and weekend hours, flexible scheduling and walk-in contraception appointments to facilitate easy access to contraception. As noted above and further in the chapter, observation of CUs website, service hours and lobby are not tailored to the CU demographic participants described, indicating CU decision makers may unconsciously be tailoring services to students that have access to transportation, more flexible schedules and less time constraints, thus incorrectly assessing how the Student Health Center can best serve the needs of students particularly in regard to contraception.
Observation of the CU Student Health Center lobby did not reflect CUs diverse student population. The Student Health Center has an architecturally designed lobby, depersonalized interior, devoid of any pictures, photos or artifacts which might represent the diverse population described in participant interviews. This depersonalized interior, points to a colorblind positionality or the assumption that needs for students are the same regardless of what color they are. Institutionally, the notion of colorblindness depersonalizes racial issues and thus distances participants from personal responsibility making it difficult to identify embedded beliefs and bias which inadvertently perpetuate systemic barriers and inequities (Gonzales, Kanhai, & Hall, 2018) This institutional colorblindness is in opposition to participants’ personalization of CU student needs and creates tension between the participants view of CU student needs and the institutional indifference to those needs. This is tension is a recurring theme, noted in subsequent chapters.

The above hours on the SHC website were only found after scrolling through pages of information about tuberculosis, measles, immunization requirements, privacy practices and accreditation. Given the above description of the students served by CU, there appears to be a disconnect between the best way to operationalize “providing high quality accessible healthcare” for students described as having "not had very much experience with healthcare services in general" and have a “lower understanding of how things worked both in the health care system as a whole” since they may not scroll through pages of
information on infectious disease to find the information needed to access the SHC.

Additionally, a student viewing the Student Health Center website would have to scroll through pages of information before finding two lines related to family planning services under the heading “Services We Provide,” again indicating a disconnect between students described above and how to best operationalize the institutional goals, of “shall include the provision of family planning services” and “providing high quality accessible healthcare”. The healthcare naïve students described by the participants may not receive the information they need to access full-spectrum contraceptive services at the SHC in two lines on the 5th page on the website. Dedicating two lines to family planning services and burying these services deep in the content of the CU SHC website speaks to the institutional value and significance placed on these services since the most important, valuable information is generally given the most prominent spot on a page.

Another subtle but important example of unintentional embedded bias is the deficit based language noted in the above interviews such as “lower understanding,” “very inexperienced” and “not as fortunate” which imply inferiority consistent with a deficit theory lens. Deficit theory language implies that students, because of genetic, cultural, or experiential differences are inferior to others; that is, they have a deficit. Nieto (2000) notes:
One problem with such a hypothesis is complete responsibility for failure is placed on the person, their home and family, effectively reducing the responsibility of the school and society, effectively blaming the victims rather than looking in a more systemic way that schools and society at large perpetuate problems and explore these factors together (Nieto, 2000).

As educational leaders personally and institutionally, it is essential to continually examine our own histories, identities, and positionality and recognize how embedded biases impact our ability to fully understand the circumstances of our students and thus influences implementation of full-spectrum contraception in student health (Gonzales, Kanhai, & Hall, 2018). Sensitivity to the subtle ways CU systemically perpetuates a deficit theory lens is an essential part of the transformative process towards reproductive health equity.

As seen above, data from participant interviews notes the essential role of the Student Health Center as an access point for effective contraception, the diverse needs of the student population and highlights how tailoring services to meet the diverse needs of students should be a priority; however participant interviews and additional data sources from CU documents and the website show a mismatch between the diverse needs of the student population as reflected in the interviews, the goals of the institution as per documents and how the needs for full-spectrum contraception are actually met in the Student Health Center.
This mismatch points to a need for CU leaders to question why services are not tailored to CUs student population and wonder if deeply ingrained generalizations and thoughts may be unconsciously influencing our behaviors and decisions (Senge, 2013). In the next section, I will examine how fear and discomfort influence decisions with regard to implantation of full-spectrum contraceptive care.

How Fear and Discomfort Influence Decisions

Participant interviews noted recurrent themes of fear and discomfort. This theme can be divided into subthemes of 1) Fear as an Influence on Students’ Contraceptive Choices, 2) Fear and Discomfort as an Influence on Decisions Regarding Implementation of Full-Spectrum Contraception in the Student Health Center.

Fear as an Influence on Students’ Contraceptive Choices

Participants’ conversations reflected a belief that fear was a factor in students’ contraceptive choices. This is significant since as previously noted, college students utilize less effective methods of contraception and use these methods inconsistently, leading to lower efficacy rates and higher unintended pregnancy rates (Sutton & Walsh-Buhi, 2017). By recognizing fear as a factor influencing contraceptive choices, CU can better address this barrier and decrease its influence on full-spectrum contraceptive choices. Participants noted students had misinformation and were fearful of different contraceptive methods. As noted by Aiden:
I think that a lot of the students were scared, maybe, for lack of a better term. They had heard things, it might've been a cultural difference, but I had a lot of students that heard from a family member or a friend that method A might cause sterility compared to method B or that type of thing. There’s a large Hispanic population and that’s what I noticed hearing from them...with contraceptives specifically, there were a number of patients that told me, "Oh, my relative told me that if I get an IUD, I'm not going to be able to have kids in the future," or, "if I take oral contraceptives it's going to shrink my eggs or waste my eggs," I heard that on more than one occasion.

The above statement reflects the misinformation and fear that causes students to utilize less effective methods and use them inconsistently, leading to higher unintended pregnancy rates. Students needed access to the time, support and evidence-based patient information provided in the Student Health Center to correct misinformation and myths regarding contraception. Participants noted how evidence-based information and support was provided by clinicians on a one-to-one basis as evidenced by Tanner stating:

I ask them to have their phone with them and then we'd go to the Bedsider website and then we just, on their phone, just go through the pages and they're like usually, "Wow this is a really cool website." Or we go on the CDC website on their phone because then it's there. They can find it really
easily. If there's somebody that wants paper, then I give them a paper that I have from the CDC.

Aiden added:

I think the access to the providers and the staff and the counseling that they could get was super beneficial to them. And then I think it had a domino effect where the students talk to each other because it happens the other way too with misinformation and just the correct information from counseling, I think was important to their success…. there's a handful of different sources of information for the contraceptive effectiveness. What I liked to use was UpToDate. I'm usually always reading that for anything, not just contraception…

As noted above, clinicians play a vital role in providing evidence-based patient information to CU students to dispel misinformation and alleviate the fear noted in previous participants’ interviews however, in addition to this, there are many other ways the CU SHC could disseminate this information. Accessing the evidence-based information noted above was dependent on seeing a healthcare provider and overcoming the previous barriers to care noted in the Student Health Center such as access information on the student website and limited student health hours. Notable upon observation of the Student Health Center website and the Student Health Center lobby was an absence of culturally relevant, accessible, evidence-based information on effective contraception such
as LARCs. This again points to a disconnect between CU student needs and implementation of full-spectrum contraceptive care.

In addition, as noted previously, students were often inexperienced with accessing the healthcare system and their healthcare needs which may give insight into why fear and discomfort were reoccurring themes in conversations. Conversations also reflected how fear and discomfort impacted students with regard to their choice of where to seek health care. According to participants, patients feared or were uncomfortable with accessing the healthcare system outside of the Student Health Center and needed time and support to make the transition. Tanner stated:

If you even suggest like during the winter break or the spring break that they have to go to a Planned Parenthood or Family Planning Associates (FPA) or another outside provider, they're just like, "Ugh." They can't handle it. Even if you help them go on their phone and say, "Look how easy it is. Here's FPA. See how easy. Go online, pick your ..." They just feel so much more comfortable here.

Tanner recognized the discomfort students have with accessing care outside of CUs SHC but noted how providers can be a bridge to the outside healthcare system. The trust and empathy exhibited in the above exchange demonstrated how these skills can be utilized to mentor students and decrease fear and discomfort related to accessing full-spectrum contraception. Lennon expanded on the above by noting:
They're not comfortable going anywhere else. They don't know how to access the care anywhere else because other practices may not provide the education and support that these specific individuals need because of their age, because of their socioeconomic status, they need extra support, extra hand holding. And they may not get that somewhere else. So they may not be satisfied and based on or experiences elsewhere, that would act as a deterrent to them going back and getting reproductive health care.

Lennon and other participants found students’ discomfort with accessing healthcare served as a deterrent to getting reproductive health care outside of the SHC. This finding is consistent with literature which shows this demographic utilizes less effective methods of contraception and uses them inconsistently with resultant high unintended pregnancy rates (Birgisson et al., 2015; Finer & Zolna, 2016; Prentice et al., 2012).

Although the above conversations reflect comfort with clinicians in the student health center once accessed, the center itself might be initially intimidating to the students described in the above conversations. Students who have difficulty making an appointment and accessing healthcare may never make it all the way to seeing a provider in the student health center.

During my observations, the physical structure of the student health center might be a barrier since participant interviews reflected a secretive nature and shame surrounding the topic of contraception. The student health center is a
freestanding building which may be intimidating for students who want to be discreet. Students enter through the glass doors of the front entrance, walk through a large lobby and must approach the staff behind the large glass wall in order to inquire about care. For students who have not previously accessed the healthcare system, the simple steps of entering the building and walking across the lobby to inquire about services might a barrier to care.

In addition to fear of contraception and discomfort with accessing the healthcare system, students were fearful of their families finding out they are seeking contraception or are sexually active. The fear and shame associated with contraception and sexual activity in their families are intertwined with knowledge deficits since, as noted by our participants, families were often the source of their information or misinformation as noted by Tanner:

They're afraid their parents are going to find out. They worry about not having a period every month. They believe that hormones are bad for you, that they cause infertility or that they will lose their hair or that they will have decreased libido, or the implants will cause the arm to swell or the IUD will cause infertility.

In addition to the fear, discomfort and misinformation noted above, participants noted there may be cultural differences impacting contraceptive choices. Lennon noted that participants felt culturally it was unacceptable to talk about certain subjects which limited accessibility to evidence based contraceptive information and expanded on the above information when stating:
So with this population, I think, they're mainly Hispanic. And from what I've noticed, there are certain topics that are off limits with their parents, such as contraception. They cannot openly have conversations with their parents about their sexual health, family planning services, reproductive health. And so that makes them even more naive when it comes to this topic and healthcare.

Aiden noted cultural home remedies which students utilized and specific misinformation regarding contraception which may have cultural implications such as:

There's a large Hispanic population and that's what I noticed hearing from them and not even specifically with contraception but other home remedies, burning candlewicks in your ear to get rid of ear infection, that stuff. But with contraceptives specifically there was a number of patients that told me, "Oh, my relative told me that if I get an IUD, I'm not going to be able to have kids in the future." Or, "If I take oral contraceptive, it's going to shrink my eggs or waste my eggs." I heard that on more than one occasion.

Participants' recognition of cultural norms influenced how full-spectrum contraception was provided by tailoring conversations with a sensitivity to the above issues. Understanding cultural norms helps to uncover and address some of the roots of students' fear and discomfort.
Furthermore, Aiden noted that taking extra time and providing thorough patient information regarding full-spectrum contraceptive procedures before LARC procedures increased the ease and comfort of patients by noting:

The procedures always seemed more often than not to go smoother if the patient was at ease, and they were clear on what they were getting and had an accurate idea of how the procedure was going to play out and how they can expect to feel afterwards…both parties have to be comfortable with what is going on for there to be a positive outcome I would say. I think they responded mostly to the one-on-one sitting down and talking with them. In terms of the LARC methods themselves, the counseling for me took a lot longer than the actual procedures themselves.

Participants’ recognition and understanding of students’ fear and discomfort influenced the provision of full-spectrum contraception in the CU student health center. Clinicians were able to adapt their information to address fear and discomfort thus alleviating these barriers to full-spectrum contraception. Fear and discomfort helps to explain why most unintended pregnancies in this age group are due to contraceptive failure attributed to inconsistent or incorrect use of contraception. This points to a need to increase access to evidence based patient education tailored to the specific needs of this population and illustrates an area for further research.
The Influence of Discomfort on Provision of Full-Spectrum Contraception

Provider discomfort and comfort were reoccurring themes with regard to provision of full-spectrum contraception such as same day placement of LARC devices. As noted in the above conversations, embedded cultural and social norms influenced what participants believed was acceptable or unacceptable. These norms influence CU staff, clinicians, and administrative comfort levels which in turn influence the provision of full-spectrum contraception in the student health center. Aiden noted previously “…both parties have to be comfortable with what is going on for there to be a positive outcome..”, meaning the provider also needs to be comfortable with the procedure in order for there to be a positive outcome. Lennon expanded on this theme by stating:

Well, I would say…lack of provider training, know-how, being comfortable with the LARC methods is a barrier to patients having access to these methods. So, if the providers are not comfortable in providing the methods, then they're less likely to have a favorable viewpoint in their educational counseling of the patients. And even if the patient does get a LARC and the provider, how should I say this… doesn’t act comfortable and confident in providing that service, the patient is less satisfied.

Participants’ statements above note that the provision of full-spectrum contraceptive care is influenced by the level of comfort level of the providers. Lennon notes a connection between providers’ decreased level of comfort with LARC methods and a less favorable viewpoint when describing these methods to
patients. Discomfort with a topic can be unconsciously translated to patients with non-verbal cues such as tone of voice, body language, and facial expressions even when providing evidence-based information.

The above statements indicate that some providers at CU were not completely comfortable with LARC procedures which translated into decreased confidence in providing full-spectrum contraceptive care thus decreasing patient satisfaction with these devices. Provider training as noted above could increase the comfort level of providers but as noted further in the chapter, lack of resources for additional training is a barrier at CU. Again, this mismatch between provider needs and how services are operationalized in the student health center influences the provision of full-spectrum contraceptive care in the student health center.

In addition to students and providers, participants’ noted how fear of the unknown impacted administrative decisions regarding implementation of contraception. For example, Lennon stated:

…because we have the opportunity to expand and offer other means of providing contraception, using a student’s insurance, but it hasn't been accepted…. that’s one reason, and another reason is fear of the unknown...

The above statement acknowledges that fear of the unknown prevents expansion of services at CU with regard to exploring different options of reimbursement. LARC devices such as the IUC or Implant can cost between
$800-1000.00. As noted further in the chapter, these devices are not covered by the student health fee and unless a student qualifies for the Family PACT program, most students will choose the less effective, less expensive methods such as condoms or birth control pills. This is consistent with research findings which show less effective methods such as oral contraceptive pills and male condoms remain the two most popular methods of contraception while less than 3% of women in the United States utilize the more effective LARC methods (Bharadwaj, 2012; Secura et al., 2010).

Exploration of different reimbursement options for students, such as billing outside insurance vendors or grants to cover the most effective but expensive full-spectrum contraception devices would expand access and provide more equitable reproductive health services for students. Tanner also noted the resistance of change and how it impacted provision of services:

There are lots of reasons why people resist ideas...change...just the fact that it's something different. They're comfy in their roles right now...(so there is resistance to) change in routine.

Tanner notes that change is difficult. Changes in routine and roles take people out of their comfort zones. Recognizing that resistance is to be expected when the status quo is changed can help facilitate transformation as noted in the next chapter. Acknowledging how fear and discomfort influences the implementation of full-spectrum contraception is the first step towards addressing this reproductive health equity issue.
Participants note how fear and discomfort can influence provision of full-spectrum contraception in a Student Health Center on a student, clinician, and administrative level. Creating a safe space to have open dialogue about fear and discomfort is the first step towards providing the needed resources and training to address these issues. Ignoring and burying fear and discomfort only serve to create a climate of shame which further perpetuates fear and discomfort and creates a barrier to implementation of equitable full-spectrum contraceptive care.

In the next section, we will examine how organization culture and power dynamics influence the provision of full-spectrum contraception in a student health center.

Organizational Structure and Power Dynamics

Participant interviews and university documents show a disconnect between the stated goals of the institution and how the need for full-spectrum contraception is actually operationalized in the student health center. Historically, higher education institutions rely primarily on hierarchical authority relations to accomplish collective goals (Bess & Dee, 2012). This hierarchal organizational structure and the resultant power dynamics has a strong influence on the aforementioned disconnect.

Participant interviews revealed different constituencies such as clinicians, staff and administration across CU view the use of power differently. Traditionally, administration views power as a legitimate tool that can be used to advance organizational goals, while clinicians and staff understand legitimate
power can be a barrier to operational goals if not utilized with the expert power of clinicians and staff. This emphasizes the important reality that power is not necessarily good or evil but can effect positive change as well as oppress and alienate (Bess & Dee, 2012).

A review of the organizational chart for the University reflects a hierarchal organizational structure. At the top of the organizational chart is the President of the University, under the President is the Vice President (VP), under the VP is the Assistant Vice President (AVP) for Student Services and under this position is the Interim Director of the Student Health Center. Clinicians and staff who provide direct service to students are notably absent from the decision making hierarchal organizational chart. For example, Lennon noted:

It's very top down. There's no collaboration whatsoever. We rely on our director to relay the message to upper administration. Messages get lost in translation. Upper administration doesn't care, doesn't seem to be concerned with speaking to health center staff and fully understanding the issue at hand. Oh, yes, everything seems to get stuck in upper administration.

As Lennon noted, CU's organizational structure impacted communication and collaboration between administrators and health center staff. This tension influenced the fluidity and prioritization of issues related to the provision of full-spectrum contraception in the Student Health Center. The organizational structure reflects a scientific management school of thought which values a top-
down, authoritarian, hierarchal structure with the expectation that the leaders at the top set the goals and the employees simply follow the rules set forth (Gonzales, Kanhai, & Hall, 2018). As noted above, conversations with participants reflect this top-down, hierarchal organizational structure with vertical communication and note how this impedes collaborative efforts and operationalization of services.

Demographically, the majority of university presidents are White males with an average age of 61 (Schnieder & Deane, 2015). Even if specific administrators at CU do not fit this demographic, the culture of higher education administration may unconsciously perpetuate a white male perspective. Findings point to this contributing to the disconnect between the institutional goal of providing high quality accessible reproductive services and how full-spectrum contraception is actually provided in the student health center.
Confirmation of how this organizational structure can limit the fluidity and timeliness of operational changes in the Student Health Center was also noted by Rene:

We've gone through changes in leadership at many levels of the university, not just at the Student Health Center, so I mean total number of conversations to get approval was probably like four. It was spread over
months. The individuals, the providers, who essentially ought to be managing the program are the least empowered.

Rene identified tension between leadership (administration) and (clinical) providers and the subsequent communication difficulties and power struggles which impacted the provision of full-spectrum contraception. In addition, changes in leadership at many levels in the CU hierarchy further impaired efficient provision of services in the Student Health Center.

Additionally, the above interviews reflect frustration between the administration with legitimate power and the staff who may have expert power but no legitimate power to make decisions. Leadership values legitimate power as a call for obedience because its holder has formal authority in the hierarchy of an organization, thus consistent with the scientific management approach; however, clinicians with clinical expertise value expert power which esteems special skills and competencies as equally legitimate thus creating the tensions noted above (Bess & Dee, 2012). These tensions and frustrations caused by the gap between clinicians with expert power and the administrators with legitimate power were further elucidated by Tanner:

I don't think we have the resources, that's so hard. We don't have enough. People don't look at it as important. I guess the word's importance. We don't have enough legitimacy or clout to make the changes. There's no interest in wanting to do it. There would be resistance to it…change.
Tanner noted there was resistance to change by decision makers which echoes earlier sentiments in the chapter. This resistance impedes decisions related to resources needed for the provision of full-spectrum contraceptive care. In addition, frustration is expressed at the lack of “legitimacy” or “clout” to make necessary changes, again pointing to the tension between expert and legitimate power. The frustration expressed above with the current system and the power struggles which influence the implementation of full-spectrum contraception were further impaired by a mismatch between the goals and priorities of the decision making administrators and the clinicians and staff who operationalized these goals and actually provided services as noted in the above conversations. Rene expanded on how this mismatch in priorities impacts the organizational needs of the student health center by stating:

Administration needs to approve extra time for (a qualified) person to provide training and also to work in an alternate location or to have the trainees go up to an alternate location. And it seems to me that administration does not value this service as much as the providers do. Their top focus is not on contraception and providing the appropriate level of care and access that we should.

Rene expressed frustration and acknowledged differences in the values of administration versus what providers valued, providing another example of administration’s legitimate power to approve extra time versus the providers’ value for training, access and patient care.
As noted by Rene in a previous statement, there were leadership changes at many levels throughout the university. These changes added to the barriers to implementation of contraceptive care as reflected in Tanner’s statement:

Right now, there is chaos from an administrative standpoint in the health center. Nothing’s got traction to go anywhere. You just bring stuff up at meetings where change would be initiated and it just kind of falls. Chaos from an administrative standpoint, from a staffing standpoint, from a communication standpoint… everywhere.

Tanner verbalizing feelings of chaos regarding administration is significant since it reflects a lack of confidence in the leadership of CU to responsibly address change or navigate day to day issues efficiently or effectively, thus impacting provision of full-spectrum contraception for students.

If the best intentions of the administrators are not communicated to staff and clinicians, frustration and miscommunication can occur. Administrators with legitimate decision making power utilize positional authority and while they may have broad and relevant experience, if they never interact with subordinates, their knowledge is seldom on display for workers to assess (Bess & Dee, 2012). Lennon further expanded on how the current organizational culture influences provision of full-spectrum contraception by stating:

Whether it's just a lack of healthcare knowledge or sometimes it's different priorities, sometimes it's personal, when that gets translated up the chain, it gets miscommunicated. And so, when you don't have the support of your
administration, it causes everything to fall down. You need proper support in order for this type of program to succeed.

Lennon notes different priorities, knowledge deficits, miscommunication and lack of support from administration as barriers to implementation of full-spectrum contraceptive care which has been echoed throughout the chapter. CUs organizational structure and power dynamics create a culture which influence collaboration and communication in the institution thus impacting decisions regarding implementation of full-spectrum contraceptive care in the Student Health Center. This culture reflects the values and norms expected at CU including power structures, decision making process, communication channels and what the institution values as important. As noted earlier in the chapter, sometimes culture is unknowingly embedded in the institution and institutional models in higher education are often indifferent to the needs of a diverse society that includes students from a vast array of backgrounds and communities (Conrad & Gasman, 2015). Data from participant interviews and university documents point to a disconnect between the stated goals of the institution and how the need for full-spectrum contraception is actually operationalized in the student health center as previously noted and point to the organizational culture, including the hierarchal organizational structure and power dynamics as a strong influence in the disconnect.

This mismatch points to a need for CU educational leaders to question assumptions of why services are not tailored to our current student population
and wonder if our assumptions and generalizations regarding power and organizational structure should be revisited. Historically, higher education institutions rely primarily on hierarchical authority relations to accomplish collective goals (Bess & Dee, 2012); however, findings point to this structure as a barrier to providing equitable services to students. Bess and Dee (2012) note “there are vast disparities in power in organizations and in society at large, but people are not powerless” (p.544). The tensions and frustrations echoed throughout the participants’ conversations serve as a starting point to open up dialogue with administration regarding how the current culture may be impeding implementation of full-spectrum contraceptive care. These small acts of resistance, such as questioning how power dynamics and organizational structure influence student services such as full-spectrum contraception can trigger a tipping point that reshapes the balance of power (Bess & Dee, 2012). In the next section, external drivers such as politics and economics will be examined to see their influence on provision of full-spectrum contraceptive care.

External Drivers Influencing Decisions Regarding Provision of Full-Spectrum Contraception

As noted above, internal forces such as power and organizational structure influence the implementation of full-spectrum contraception in the CU student health center; however, the organization is also influenced by external forces. An examination of how these external forces influence CUs internal norms is essential since findings indicate CUs organizational culture can be
connected to neoliberalism and a scientific epistemology which values capitalism and positions politics, economics and cultural climate as strong drivers for resource allocation both internally and externally.

CU is categorized as a comprehensive university which relies heavily on state revenue and thus must address concerns of state legislators such as rising costs of tuition and fees and workforce needs (Schnieder & Deane, 2015). The cost of student health fees and the desire to keep student health fees down has a direct result on the budget and subsequently the services offered to students as noted by Lennon:

At the university, everybody pays a health center fee so that grants them access to the health center. They can see a provider for free and they can get some other services for free. We should be providing full scope contraceptive care. However, we do have some limitations based on insurance and ability to pay and cover those services.

As noted above, CU should be providing full-spectrum contraceptive services to all students regardless of insurance status or ability to pay. Cost of different contraceptive options should not be a factor, however, as noted above, the more expensive LARC methods are limited. This unequal distribution of services noted above point to an equity issue and again a mismatch of CU student needs with how services are actually implemented in the student health center. External pressure from state legislators and politicians to keep student health fees low influence how the more expensive, effective contraceptive
options are distributed to students thus influencing implementation of full-
spectrum contraception in the student health center.

State funding for public higher education institutions requires targets and
accountability through student outcomes such as timely graduation rates (2020
Higher education act, 2020; Legislative Analyst’s Office, 2017; Lumina
Foundation, 2020). These external drivers contribute to the above noted
mismatch between administrative goals and the goals of the clinicians and staff
who provide services to students in the Student Health Center as expressed by
Lennon:

They may say, “Yes, this is an important topic, yes, we know that we need
our students to be healthy”, but they are looking at it from a different
viewpoint and administration..they’re more focused on graduation rates.
And so, the health center does not receive the resources they need to
properly provide services to them. There’s definitely...a disconnect.

Lennon’s statement points to administration’s focus on graduation rates,
which is tied to funding for CU, and a subsequent disconnect with the provision of
resources for the Student Health Center to properly provide services. This
mismatch of priorities is illuminated by Lennon’s statement, “yes, we know that
we need our students to be healthy…but they are looking at it from a different
viewpoint..”. Different stakeholders value different priorities. This disconnect
shows administration fails to make the connection between the importance of
provision of full-spectrum contraception and graduation rates which is significant
since as previously noted, one in 10 dropouts among female students at community colleges are attributed to unplanned pregnancy and seven percent of dropouts among community college students overall (Prentice, Storin, & Robinson, 2012).

Politics and economics also influence how students access full-spectrum contraceptive care outside of the Student Health Center which in turn influences services offered within in the Student Health Center. In other words, the political climate drives what insurance is available for students and what is covered. Insurance coverage and the Affordable Care Act (ACA) look very different depending on whether the democratic party or the republican party is in the majority. Services available outside of the Student Health Center through insurance coverage and/or ACA may increase or decrease access to full-spectrum contraception thus impacting the students utilizing the Student Health Center for these services. As Aiden noted:

I know when I started in the health center there was talk that it (the Affordable Care Act) might decrease the ability of the health center to provide full-spectrum contraceptive services. I guess the idea was because with the Affordable Care Act, more people would have medical care through other health plans in which case there wouldn't necessarily be any type of programs like Family PACT which are funding and paying for the contraception in the student health center. These students aren't paying out of pocket for especially the LARC methods.
Aiden indicated that increasing insurance coverage for students might decrease the number of students eligible for Family PACT. In addition, since Family PACT is the only program utilized in the Student Health Center to pay for the expensive, effective LARC devices, this would decrease the number of students utilizing the student health center for effective contraception. Aiden also notes that students would not pay for these $800-1000 devices out of their own pockets. These external factors influence the provision of full-spectrum contraception in the Student Health Center and as previously noted, might contribute to the use of less effective, less expensive methods since participants noted patients do not feel as comfortable accessing healthcare outside of the Student Health Center.

Elections and the political climate are fluid external drivers which change cyclically. Ideally, CU should have a sustainable system to pay for full-spectrum contraceptive care for all students which limits the influence of politics and elected officials on the implementation of effective contraception at CU. Lennon further expanded on how outside insurance coverage for students might change how services are offered in the Student Health Center by stating:

And with (outside) insurance they should have access to contraception using their insurance and if they were going through that channel, it would reduce the number of students that we saw, the patients that we saw in the health center accessing contraception because we don't bill insurance.
The above statement reflects how students’ outside insurance coverage changes where students access full-spectrum contraception which impacts how services are provided in the Student Health Center. Billing outside insurance providers would provide another reimbursement option for the LARC devices at CU but the risk versus the benefit of exploring this option changes depending on the political climate and the number of insured students seen at CU. For example, if the majority of students do not have outside insurance and qualify for Family PACT, there is no need for the Student Health Center to hire and train staff seek reimbursement from other insurers and vice versa.

External drivers, such as addressing concerns of state legislators regarding rising student fees, impacts the Student Health Center, since the provision of services in the Student Health Center relies primarily on student health service fees, thus, reimbursement for services was a reoccurring theme in participant conversations as noted above. As noted previously, not billing outside insurance providers for the most effective but costly full-spectrum contraceptive devices and procedures creates a barrier for many students in the Student Health Center and perpetuates healthcare inequities as noted by Lennon:

Now in terms of insurance, a lot of methods are, well, the most effective methods are very expensive and even for less expensive methods, sometimes a pack of birth control pills can cost $10 a month. That’s still a large cost to the students. And within our university system, they do not currently take health insurance. So even for students that do have health
insurance that would cover contraceptive methods, the student health center doesn't take it. This creates a barrier to access for them. Right now, the health center only accepts family PACT.

Lennon notes again how reimbursement or lack of reimbursement options in the Student Health Center for the expensive LARC options creates a barrier to access of full spectrum contraceptive care since as Aiden noted previously, students can not pay $800-1000 for a contraceptive implant or an IUC. This highlights the need for CU to establish a reliable, reimbursement option for LARC devices in order to make full-spectrum contraceptive care economically sustainable. This is an essential component of the provision of equitable contraceptive care. Rene explained how the Student Health Center is exploring different reimbursement options for full spectrum contraceptive options in the Student Health Center as noted:

…and now we’re trying to explore ways of serving other students. So just encouraging the health center to have multiple ways of sourcing devices such as implants and IUD and have a plan in place for students that come in if they’ve got their insurance set up. So that way, if they’ve got insurance or if they don’t have insurance, have a plan in place for them…all of those considerations.

Rene notes how it is imperative to find a way for the Student Health Center to provide effective contraception to all students regardless of what their economic or insurance status is. Reproductive equity means being able to
provide the same contraceptive options to all the students regardless of their individual barriers. Different reimbursement options can help minimize the influence of external drivers if the political or economic climate changes. Lennon also notes Student Health Centers should explore multiple reimbursement and sourcing for LARCs by stating:

The other thing I would do is I wouldn’t solely rely on patient paying or using family PACT to pay or health insurance to pay for the devices and the contraception. I would look into agreements, even if you’re unable to bill insurance, you can go through specialty pharmacies, you can bill the insurance and ship the devices. I would look into all the different options to providing those methods.

Lennon notes there are various ways to approach reimbursement for LARC devices which could be explored including specialty pharmacies which could take care of billing insurance for reimbursement. As noted in the above interviews, economics, politics, reimbursement and the socio-economic status of students influence which students receive full-spectrum contraception in the Student Health Center. External drivers, such as the political climate, are intertwined with healthcare coverage and reimbursement and have implications for internal decisions which influence care as noted by Lennon:

Administration has held back on making decisions or moving forward with any plans because they want to wait and see what’s going to happen with the Affordable Care Act. When there’s a new president, let’s wait and see
what happens. Well I don't know, this may change, so let's wait and see what happens and nothing changes.

Lennon further notes that these options have not been explored by administration because of the uncertainty of external drivers such as the presidential election. As previously noted in the chapter, change is difficult so it is more comfortable to keep the status quo when there is uncertainty.

In addition, external barriers such as politics and economics influence care at other clinics, which in turn, influences the use of the Student Health Center. Reimbursement for LARC devices can be expensive for outpatient clinics so often they are only ordered after a health insurance provider authorizes their purchase for a patient. This necessitates a minimum of two visits for a patient, one for consultation, another for after the device is authorized and procured for the procedure. In comparison, this makes it more convenient for patients to get full-spectrum contraception at the student health, as noted by Juno:

Students prefer to get contraception at the student health center because we have everything that we need at the time that they come in for their visit, so they don't have to go and come back. We're able to offer the contraceptive of their choice at the initial visit. That is important to because it minimizes the possibility of them not being able to return. They're here, and it's convenient for them. A lot of other offices require you go in for a second and possibly a third appointment since they don't have every
contraceptive method in stock, so they would have to get it ordered or they would have to get it authorized through the insurance.

Juno notes that same day placement of LARCs is often difficult to obtain at other clinics because of healthcare economics thus making access to these devices easier at the Student Health Center. Higher education does not exist in a vacuum. Recognizing and proactively planning for external drivers which influence the provision of services is necessary to effectively implement full-spectrum contraceptive care in the Student Health Center.

The above data show how external drivers such as politics and economics can influence implementation of full-spectrum contraception in a Student Health Center. Acknowledging these external drivers and their influence on implementation of full-spectrum contraceptive care in a student health center helps proactively address these issues. In conclusion, the next section will summarize the data regarding the factors which influence the implementation of full-spectrum contraceptive care.

Conclusion

In this chapter, I presented the findings of this study. Data showed how four interrelated themes influenced the implementation of full-spectrum contraceptive care in a student health center. The four interrelated themes are: 1) Essentialization of Students and the Influence on Operationalization of Student Health Services in Regard to Full-Spectrum Contraceptive Care, 2) Fear and Discomfort as Drivers of Decisions Regarding Full-Spectrum Contraceptive Care.
3) Organizational Structure and Power Dynamics and their impact on Institutional Culture which Influences the Implementation of Full-Spectrum Contraceptive Care and 4) External Drivers of Decision Making in Regard to Full-Spectrum Contraceptive Care in a Student Health Center.
The first theme highlighted how the essentialization of students contributed to a mismatch between the needs of the students and how student services were implemented in regard to full-spectrum contraceptive care in the
Student Health Center. The data highlighted the importance of Student Health Centers as an access point for full-spectrum contraceptive care for the student demographic but showed a disconnect between the student needs and how services were provided. Essentialization of students or ignoring the changing demographics of higher education and assuming the student landscape remains primarily the white male demographic of the past impacted CUs ability to provide equitable student health services. This influenced how CU implemented services and created a mismatch between evidence-based best practice goals and the actual implementation of these goals, which unconsciously perpetuates embedded social inequities.

The second theme examined how fear and discomfort influenced decisions regarding full-spectrum contraceptive care with students and with decision makers in the Student Health Center. Data showed patients feared accessing the healthcare system, had misinformation and fear and shame regarding their sexual health and contraception, and wrestled with cultural and family barriers. A mismatch between these fears and discomfort and how the Student Health Center provided access and information to full-spectrum contraceptive care showed an disconnect between what students actually need and how services are operationalized in the Student Health Center. A subtheme of fear and discomfort was related to providers of contraception and how their comfort level influenced provision of LARCs and how fear impacted administrative decisions regarding implantation of services in the Student Health
Center thus creating a barrier to full-spectrum contraceptive care in the Student Health Center.

The third theme highlighted how the top-down, hierarchal organizational structure and authoritative power dynamics created a culture which influenced the implementation of full-spectrum contraceptive care. This structure contributed a lack of collaboration between the clinicians and staff with expert power who were responsible for the operationalization of services and the administrative staff with the legitimate power to make decisions but lacked the expertise to implement services tailored to the student demographic thus contributing to the mismatch between goals and implementation of services.

The fourth theme explored external drivers of decision making as an influence on implementation of full-spectrum contraceptive care in a Student Health Center. The intertwined themes of politics and economics were explored. State legislators approve funding for comprehensive universities which in turn influence student fees and services provided. Legislators also require targets and accountability from higher education administrators which may influence priorities and distribution of services thus contributing to a mismatch between administrative priorities and operationalization of services in the Student Health Center. Data also reflects how national politics and the influence of election results are intertwined with the external drivers of economics and reimbursement, thus influencing the provision and distribution of services to students.
CHAPTER FIVE
RECOMMENDATIONS AND CONCLUSIONS

Introduction

The purpose of this intrinsic case study was to explore factors that influence the implementation of full-spectrum contraceptive care in a comprehensive, public, university Student Health Center. For this study, I chose a single-case intrinsic study design as the best methodology since it allowed for in-depth examination of the qualitative factors which influence provision of contraceptive care within the bounded system of a Student Health Center in a four-year, public, comprehensive university system (Flyvbjerg, 2011; Stake, 2008). This qualitative, intrinsic, single-case study provided a “rich description, analysis, insight and a better understanding” of factors that influence implementation of full-spectrum contraceptive care in CUs Student Health Center (Stake, 2008, p.437).

This qualitative research study is grounded in Critical Feminist Theory (CFT) and Critical Organizational Theory (COT) to gain a better understanding of factors which influence provision of full-spectrum contraception in a Student Health Center. A critical feminist praxis is utilized to explore issues of power and oppression and challenge dominant ideologies and discourses which are necessary given the history of reproductive injustice and current reproductive health equity issues which exist (Bernal & Aleman, 2017). In addition, examining organizational policies and practices through a Critical Organizational Theory...
lens adds another dimension to gain insight into embedded, institutional barriers which may inadvertently be perpetuating barriers to effective contraception (Gonzales, Kanhai, & Hall, 2018).

The research questions guiding this study were: 1) How does a four-year public university Student Health Center implement full-spectrum contraceptive services for their student population? 2) What are the factors influencing the provision of full-spectrum contraceptive care in a four-year, public, comprehensive university Student Health Center? 3) In what ways, if any, do student demographics influence the provision of contraception in the Student Health Center?

In this chapter I provide an overview of the findings. In addition, I provide recommendations for practice and policy, state the limitations and delimitations of the study, and conclude with recommendations for future research.

Findings

Based on my analysis of the data, there were four interrelated themes which highlight how implementation of full-spectrum contraceptive care is influenced in a Student Health Center. The four interrelated themes are: 1) Essentialization of Students and the Influence on Operationalization of Student Health Services in Regard to Full-Spectrum Contraceptive Care, 2) Fear and Discomfort as Drivers of Decisions Regarding Full-Spectrum Contraceptive Care, 3) Organizational Structure and Power Dynamics and their impact on Institutional Culture which Influences the Implementation of Full-Spectrum Contraceptive
Care, and 4) External Drivers of Decision Making in Regard to Full-Spectrum Contraceptive Care in a Student Health Center.

**Essentialization of Students**

The first theme highlighted CUs essentialization of students. Participants noted how a lack of acknowledgement of the changing demographics of higher education and assumption that the student landscape remains primarily the white male demographic of the past at the organizational level, impacted CUs ability to provide equitable student health services.

Essentialization is not a new factor influencing reproductive health inequities. As noted in the literature, childbearing in the United States is influenced by “well-meaning people perpetuating cultural dominance by maintaining the core values, competencies and privileges of the dominant group” (Geronimus, 2003, p. 649) such as the above assumption that the student landscape remains primarily the white male demographic of the past.

Furthermore, as stated in the literature, reproductive health inequities and limiting reproductive options to oppress marginalized groups by dominant society, eugenics, and imperialism are closely related in American and English history (Geronimus, 2003; Gordon, 1974). In addition, as previously noted, race is a contributing factor to reproductive health inequity. Women of Latina descent are three times more likely to experience an unintended pregnancy than White women and Latina women are more likely to lack evidence-based information on reproductive health (Finer & Henshaw, 2006). Findings highlight the factors that
influence the perpetuation of reproductive health inequities in the Student Health Center.

This contributes to a disconnect between the needs of the students and how student services are implemented in regard to full-spectrum contraceptive care in the Student Health Center. The data highlighted the importance of Student Health Centers as an access point for full-spectrum contraceptive care for the student demographic but showed a disconnect between the student needs and how full-spectrum contraceptive services were provided.

CUs' institutional essentialization of students impacts their ability to provide equitable student health services. This influences how CU implemented services and creates a disconnect between evidence-based best practice goals and the actual implementation of these goals, which perpetuated embedded social inequities. These inequities are demonstrated in many ways, including simple day to day operations, such as Student Health Center hours, which are tailored to a more privileged population, making access difficult for students working two jobs with a full-time course load of classes, thus creating a barrier to full-spectrum contraception in the Student Health Center.

As noted previously, struggles for power between the dominant male patriarchy, and marginalized gender, ethnic, and socio-economic groups shaped the reproductive inequities present today (Gordon, 1974). Understanding how society organizes itself along the intersections of race, gender, class and other forms of social hierarchies can help inform our view of reproductive health
inequities (Verjee, 2012); therefore, acknowledging how CUs institutional essentialization of students influences implementation of full-spectrum contraception at CU and understanding issues of power and oppression is necessary in order to challenge dominant ideologies and discourses, which is necessary given the history of reproductive injustice and current equity issues which exist (Bernal & Aleman, 2017).

Fear and Discomfort

The second theme examined how fear and discomfort influenced decisions regarding full-spectrum contraceptive care with students and with decision makers in the Student Health Center. Participants perceived that patients feared accessing the healthcare system, had misinformation and fear and shame regarding their sexual health and contraception and wrestled with cultural and family barriers. To be clear these fears, cultural, and family barriers do not imply or assign blame to the families or students involved (Saenz & Ponjuan, 2009) but rather give insight into how society and institutions organize themselves along the intersections of race, gender, class and other forms of social hierarchies and therefore deepen understanding of how issues of power and oppression impact reproductive injustice and current equity issues which exist (Bernal & Aleman, 2017).

A disconnect between these fears and discomfort and how the Student Health Center provided access and information to full-spectrum contraceptive care was evident. For example, this disconnect between what students actually
need and how services are provided was evident in the Student Health Center’s lobby which did not show sensitivity to the above demographic or initiate steps to make services more welcoming or relatable for the students they serve.

A subtheme of fear and discomfort was related to providers of contraception and how their comfort level influenced provision of LARCs and how fear impacted administrative decisions regarding implantation of services in the Student Health Center thus creating a barrier to full-spectrum contraceptive care in the Student Health Center.

Organizational Structure and Power Dynamics

The third theme highlighted how the top-down, hierarchal organizational structure and authoritative power dynamics created a culture which influenced the implementation of full-spectrum contraceptive care. As previously noted, traditional organizational theory recognizes that tacit but powerful norms, values, and traditions shape organizational decision-making and prioritizing, but it is necessary to take the next step and make connections to major contemporary concerns such as reproductive access, equity and social justice and take responsibility for institutional findings, such as the ones found in this study (Gonzales, Kanhai, & Hall, 2018).

Participants’ conversations reflect CUs tradition of valuing legitimate power, which calls for obedience from staff and clinicians, since administration has formal authority in the hierarchy of the institution (Bess & Dee, 2012; French & Raven, 1959). This discourages collaboration and open communication
between staff and administration. More importantly, it underutilizes the expert power of staff and clinicians and devalues their clinical expertise and knowledge culled from day to day interactions with students (Bess & Dee, 2012).

This structure contributed to a lack of collaboration between the clinicians and staff with expert power who were responsible for the operationalization of services and the administrative staff with the legitimate power to make decisions but lacked the clinical expertise to implement services tailored to the student demographic thus contributing to the mismatch between goals and implementation of services.

External Drivers of Decision Making

The fourth theme identified external drivers of decision making as an influence on implementation of full-spectrum contraceptive care in a Student Health Center. The intertwined themes of politics and economics were evident. State legislators approve funding for comprehensive universities which in turn influence student fees and services provided. Legislators also require targets and accountability from higher education administrators which may influence priorities and distribution of services thus contributing to a mismatch between administrative priorities and how the Student Health Center provided full-spectrum contraceptive care. Data also reflect how national politics and the influence of election results are intertwined with the external drivers of economics, such as reimbursement of LARCs, thus influencing the provision and distribution of services to students.
This finding is consistent with the existing literature noting traditional organizational theory as stated above, therefore, the utilization of a non-traditional Critical Organizational Theory (COT) lens is appropriate to provide insight into these institutional embedded norms which perpetuate reproductive health inequities (Gonzales, Kanhai, & Hall, 2018, p. 513). Findings make the connection between these powerful norms, values and traditions and their influence on equitable implementation of full-spectrum contraceptive care in the Student Health Center.

Recommendations for Policy and Practice

Recommendations for implementation of full-spectrum contraceptive care are framed within a reproductive health equity framework. Strategies to encourage this transformation include enacting equity instead of essentialization, fostering familiarity instead of fear, empowering institutional agents within the organizational structure and balancing the influence of external drivers within a reproductive health equity framework. This equity lens is essential since despite effective methods of contraception, almost half of the pregnancies in the United States remain unplanned (Birgisson, Shao, Secura, Madden, & Peipert, 2015) and unintended pregnancy rates in the United States remain highest in our youngest, most vulnerable and marginalized populations thus illustrating the healthcare disparities still perpetuated in our society and at CUs Student Health Center (Finer & Zolna, 2016). Student Health Centers can provide a vital role in increasing access to effective contraception (Prentice, Storin, & Robinson, 2012);
however, equity factors influencing the implementation of full-spectrum contraceptive care thus perpetuating these reproductive health inequities in CUs Student Health Center must be addressed.

Provision of full-spectrum contraceptive care in a Student Health Center should be available to all students. Thus, recommendations for policy and practice which address the above factors that influence the implementation of full-spectrum contraceptive care in CUs Student Health Center, should begin with viewing services through a full-spectrum contraceptive care equity framework. This shared vision is necessary in order to break through the status-quo and encourage transformation.

**Enacting Equity Instead of Essentialization**

CU’s institutional essentialization of students impacts their ability to provide equitable student health services. Understanding CUs role in society as an institution that perpetuates inequity is essential since equity minded leadership throughout the institution needs to have an embedded awareness of the socio-historical context of exclusionary practices and racism in higher education and the impact of power asymmetries on opportunities and outcomes for our students in order to promote an equity focused shared vision for provision of full-spectrum contraceptive care.

**Data Driven Decisions**

In order to enact equity instead of essentialization, decisions regarding implementation of full-spectrum contraceptive care should be data driven.
Conversations, such as the ones included in this study, should be part of the continual process of learning and gathering data. This process should be ongoing and utilized in the continual assessment of factors that influence implementation of full-spectrum contraceptive care in a Student Health Center.

As noted, participants acknowledged the diverse student demographics and their specific needs, unique to CU’s population but as previously described, there was a disconnect between these needs and how services were provided. A formal continuous process of data collection should be implemented utilizing staff, clinicians, and students in order to assess the diverse student needs and the most equitable way to tailor services to those needs.

Participants’ expert power should be legitimized and they should be included in the decision making process related to the implementation of full-spectrum contraceptive care in the Student Health Center. In CU’s case, administrators utilized legitimate formal power from their official positions in the institution, while clinicians and staff had underutilized expert power from clinical expertise and knowledge from direct experience with students in the Student Health Center (Bess & Dee, 2012; French & Raven, 1959). In addition, students and peer health educators should be recognized as experts and included in the process of continually assessing the diverse demographics and fluid needs of students.

Collecting and analyzing disaggregated data should be a collaborative process involving students, peer health educators, staff and clinicians and
administration in order to foster open dialogue and create space to discuss strategies needed to achieve reproductive health equity regarding implementation of full-spectrum contraceptive care. Implementation of full-spectrum contraception should be adjusted to suit these needs accordingly within an equity framework.

Changing the CU culture from the standard of “horizontal equity or the belief that equal needs deserve equal educational resources to vertical equity, or the belief that those with greater needs should receive greater resources” (Dowd & Bensimon, 2015, p. 6) is a process which necessitates safe spaces to have uncomfortable conversations. Peer health educators, students and staff should be involved to assess whether these safe spaces are present and whether practice and policies regarding implementation of full-spectrum contraception best accommodate the diversity of students.

Kotter (2012) notes that the leadership process needed to produce change involves establishing direction, aligning people and motivating and inspiring. For example, the observation that the Student Health Center website and the Student Health Center lobby was absent of cultural relevant, accessible evidence-based information on effective contraception such as LARCs tailored to CUs diverse demographic. Establishing the vision and direction of creating a culturally relevant, welcoming atmosphere to increase LARC access and foster equitable reproductive health care, aligning the above mentioned participants
and continually motivating and inspiring change through a collaborative effort towards this change are the steps necessary to provide transformation.

**Fostering Familiarity Instead of Fear**

It is important for institutions to recognize fear as a factor influencing contraceptive choices since they can then address this barrier and decrease its influence on full-spectrum contraceptive care by fostering familiarity instead of fear.

Based on the findings of this study, institutional agents can be a bridge to mentor students and decrease fear and discomfort related to accessing full-spectrum contraception. Institutional agents are key players in the institution, “well positioned to provide key forms of social and institutional support” by facilitating information regarding key resources (Stanton-Salazar, 2011, p.1066). Institutional agents can be staff, clinicians, peer health educators or any other agent in the institution positioned to provide support to the student. Data showed providers acted as institutional agents by playing a key role in facilitating services within the Student Health Center. By facilitating students’ navigation of reproductive health services and access to care, these key players foster familiarity and are instrumental in the empowerment of the student. In addition, the trust and empathy built during interactions serves to decrease fear and discomfort related to accessing full-spectrum contraception.

In addition to institutional agents, intentional programs should be cultivated utilizing these key players as mentors or guides to ensure students feel
welcome accessing care in the Student Health Center. Rosas (2020) successfully utilized a process called “acompañamiento” or the creation of knowledge that is “accessible and relatable for communities by exposing it in such a way that matches their experiences” (Aguilar, 2018, p. 157) as a way to foster a sense of belonging and alleviate student fears in an Undocumented Student Resource Center (Rosas, 2020). A similar approach can be utilized in the Student Health Center. Outreach programs such as health fairs and welcome events can be hosted in collaboration with students and peer health educators engaging new students, their families, and the surrounding community. In addition to building bridges with allies and providing service to the surrounding communities, these events would serve to build a sense of familiarity and alleviate fears related to navigation of the health care system, increase access to the Student Health Center and make evidence based contraceptive information more accessible.

Furthermore, the Student Health Center should serve as a safe space to encourage dialogue and facilitate difficult conversations which in turn help alleviate the fear and discomfort thus facilitating accessible contraceptive services tailored to CU students. Peer health educators, students and staff should be involved to assess whether these safe spaces are present and how they can be continually adjusted or improved depending on the fluid needs of the student demographic.
Institutional agents can also be utilized to reduce fear and discomfort with staff and clinicians regarding unfamiliar procedures. Expert staff can be utilized to mentor and train new staff. These relationships can and should be fostered and encouraged informally through weekly case management discussions in a collaborative, safe atmosphere, essentially creating a safe space to discuss difficult cases. In addition, continuing education should be encouraged and paid for by the institution to ensure all clinicians have equal access to continuous, quality, evidence-based information.

Empowering Change Agents in the Organizational Structure

Based on the findings of this study, CU's hierarchal organizational structure and authoritative power dynamics influences provision of full-spectrum contraceptive care. Leaders frequently encounter traditions that are historically based, such as the organizational structure found at CU, which prove to be hindrances to effective management of the colleges and their ability to serve students (Boggs & McPhail, 2016; Gonzales, Kanhai, & Hall, 2018). Administrative leaders should acknowledge that existing policies, practices and services, such as the current organizational structure and power dynamics, are not producing the desired results (Boggs & McPhail, 2016) as noted in this study, however, this realization can cause tension since leaders with legitimate power have a vested interest in keeping the current system and change would threaten the system of “privilege and power from which they benefit” (Gonzales, Kanhai, & Hall, 2018, p. 544). As noted above, the expert power of staff, clinicians and
students should be utilized to continually assess the diverse demographics and fluid needs of CU students, however, data from participant interviews note tension between those with legitimate power and those with expert power. Empowering staff and clinicians to exercise their agency and become change agents within the organizational structure to work towards equity is essential, but tension and resistance to change is to be expected (Bernal & Aleman, 2017; Boggs & McPhail, 2016).

Participants’ conversations recognize the tension reflecting that “power should not be restricted to top-down, superior-subordinate relationships” however, staff and clinicians have not yet fully recognized that “all organizational members have power…people are not powerless” (Bess & Dee, 2012, p. 544). In other words, staff and clinicians need to harness their power and realize that even small acts of resistance have significant power to effect change on many levels. The realization that the hierarchal organizational structure and authoritative power dynamics found at CU influences the provision of full-spectrum contraceptive care is important in order to envision and reimagine a path towards equitable provision of reproductive health services.

This tension, if harnessed, can be a catalyst to open up dialogue and difficult conversation, thus promoting a “transformative rupture” which challenges (Anzaldúa, 2002) institutional inequities (Bernal & Aleman, 2017, p.86). Anzaldúa (2012) described this uncomfortable process as Nepantla and noted:
...as you make your way through life, nepantla itself becomes the place you live in most of the time...home. Nepantla is the site of transformation, the place where different perspectives come into conflict and where you question the basic ideas, tenets, and identities inherited from our family, your education, and your different cultures. Nepantla is the zone between changes where you struggle to find equilibrium. (Anzaldua, 2002, p. 548)

Therefore, the tension, discomfort, and frustration reflected in participants' conversations reflect the conflict inherent in Nepantla. Although this process is uncomfortable and disconcerting, it is also empowering. Viewed as an opportunity for growth and transformation, this discomfort can be the catalyst to challenge the institutional status quo, create space for transformation and empower change agents to strive for changes that influence the implementation of equitable full-spectrum contraceptive care.

**Balancing External Drivers within a Reproductive Health Equity Framework**

Provision of full-spectrum contraception for all students regardless of insurance status or reimbursement should be the goal if contraception is viewed within an equity framework. Although findings indicate CUs values reflect neoliberalism and a scientific epistemology which values capitalism, these values should be balanced within an equity framework instead of the reverse. Changing the CU culture from the standard of “horizontal equity or the belief that equal needs deserve equal resources to vertical equity, or the belief that those with greater needs should receive greater resources” (Dowd & Bensimon, 2015, p.1)
necessitates the balance of external drivers such as politics and economics within a reproductive health equity framework. Neoliberal external drivers are not mutually exclusive with equity goals, indeed, an institution must be financially viable and a good steward of resources in order to remain economically viable to serve students, however, this fiduciary responsibility should never be the primary goal of the institution at the expense of equitable needs of the students (Hendrickson, Harris, & Dorman, 2013).

Creating the Vision

Currently, equity language is noticeably absent in CUs mission statement, CUs institutional policy for university health services and CUs Student Health Center website. In order to enact equity as a pervasive institutional and systemwide principle, clarity in equity language, goals and measures should be embedded into CUs mission and vision statement. These institutional policies and goals subsequently guide resource allocation and day to day decisions. A commitment to equity in CUs mission statement and vision should influence each divisions culture, norms and values and be reflected in department policies, websites, communication and day to day operations.

Reframing the institutional mission and vision within an equity framework would clarify direction for change, simplify thousands of operational decisions, motivate people to take action in the right direction and coordinate the actions of different people (Kotter, 2012). This would serve to keep the institution mindful of policies and practices contributing reproductive health equity issues regarding
the provision of full-spectrum contraceptive care (Bensimon, Dowd, & Witham, 2016). Language, goals, and measures related to full-spectrum contraception should promote equitable provision of services for all students.

From Vision to Practice

Examining organizational policy and practice through a critical organizational theory lens can add another dimension to gain insight into embedded, institutionalized barriers which may influence implementation of services in student health. These subtle, nuanced biases may unconsciously influence decision making and prioritizing thus perpetuating inequitable access to effective contraception. In addition, assessing decisions through this lens will serve to balance the external drivers noted above and keep reproductive health equity as the priority.

Creating a shared vision throughout the CU system requires a thorough understanding of the difference between equity and equality as stated previously. Operationalizing this vision with changes to operational policy related to the provision of equitable full-spectrum contraception can be facilitated by embedding objective data collection and assessment strategies throughout the Student Health Center. For example, findings such as the observation of the CU Student Health Center lobby, which as previously noted, points to a colorblind positionality, could be assessed using a Reproductive Health Equity Strength, Weakness, Asset, Threat Assessment as shown below.
Reproductive Health Equity Assessment

Goal: Welcoming Student Health Center Lobby for Diverse Student Population

Reproductive Health Equity Assessment

<table>
<thead>
<tr>
<th>Impede</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Facilitate</th>
</tr>
</thead>
</table>

**Strengths:** Sensitive, Compassionate Staff, Peer Health Educators

**Weaknesses:** Impersonal, Colorblind, Not welcoming to diverse student population, not culturally relevant

**Opportunities:** Architecturally Designed, Wide Open Blank Slate

**Threats:** Limited Resource Allocation/Funding, Changing the status-quo

**Recommendations:** Foster a sense of belonging and familiarity within the Student Health Center by:

- Hosting student centered, culturally relevant outreach events throughout the year involving community members, students and families.
- Involve students, peer-mentors and institutional agents to create and maintain safe spaces within the Student Health Center
- Utilize Reach Displays/Monitors both outside of structure and the inside lobby with evidence based, culturally relevant patient information on a wide variety of topics. Rotate topics such as nutrition, stress reduction, exercise and self-care with full-spectrum contraceptive care.
Reproductive Health Equity Assessment

Goal: Funding for Effective Contraception including LARCs for all students in the Student Health Center

Reproductive Health Equity Assessment

| Impede | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Facilitate |

Strengths:

• Student Health Center funding comes from student health fees which is fairly predictable and stable.

Weaknesses:

• Student Health Fees face pressure from students, community, politicians and state to not raise student health fees.
• Current budget does not provide funding for LARC devices for students, therefore, there is inequitable access to effective contraception (LARCs) in the Student Health Center
• Students with insurance (other than Family Pact) must go elsewhere for the most effective methods of contraception (LARCs) since the Student Health Center does not take outside insurance, thus providing inequitable distribution of services for students

Opportunities:

• Creative and knowledgeable staff to enhance students’ existing cultural capital to students regarding accessing expensive LARC devices outside of the Student Health Center
• Community Services available for students outside of Student Health Center such as Planned Parenthood.
• Family PACT, state funding for reproductive health services including expensive LARC devices for students who qualify in the Student Health Center

Threats:
• Limited budget, tied to student health fees which is affected by external factors such as politics and pressure from community and students.
• State funding for institution depends on politics and changes depending on which state and federal politicians are in office.
• Funding depends on economic viability of state budgets which is impacted by national economy.

Recommendations:

• The institutional mission and vision should be framed within an equity framework thus clarifying direction for change, and simplifying operational decisions within this framework
• Decisions should be data driven including qualitative data from clinicians, staff and students regarding the equitable distribution of services tailored to the needs of the students
• Each decision should utilize this assessment tool throughout the decision making process to ensure equitable provision of services to students while stewarding institutional resources responsibly.
• Provision of effective contraception including LARC methods should be available to all students regardless of insurance status, therefore, if the current budget of the Student Health Center does not allow for this, outside insurance and other reimbursement options for these services should be explored by a task force consisting of administration, clinicians, staff and students.

Figure 5.1. Reproductive Health Equity Assessment

Utilization of the above framework keeps the institution accountable and reframes goals to keep reproductive health equity as the mission instead of the natural institutional gravitation towards neoliberal goals. This tool or the questions within it should be considered in the decision making processes of implementation of full-spectrum contraceptive care in the Student Health Center to balance the influence of external drivers and keep the goal of equitable implementation of full-spectrum contraceptive care at the center of all decisions.
Limitations

Limitations of this study were the inclusion of only staff and administrators at the Student Health Center as participants and excluding students and the inclusion of only one campus site in the university system.

Delimitations

This study’s main purpose was to explore factors that influence the implementation of full-spectrum contraception in a Student Health Center. It was not intended to evaluate the institution, the Student Health Center, the services the Student Health Center provides or the providers in the Student Health Center.

Suggestions for Further Research

Based on the findings in this study, the following areas to be considered for future research. Given the scarce amount of literature on the provision of full-spectrum contraception in Student Health Centers, it is highly recommended that additional research with a larger sample including students be conducted. Students’ firsthand experiences with the above topic will contribute essential insight and provide a unique lens in order to better understand the factors that influence provision of contraception in a Student Health Center. Furthermore, this study should be conducted in different higher education institutions including but not limited to public and private institutions, rural, suburban and urban institutions and small, medium and large institutions. Each of these higher education
institutions will have unique factors which influence the provision of care and add a different perspective to factors that influence the implementation of full-spectrum contraceptive care in a Student Health Center. Additionally, given the scarce amount of literature on provision of contraceptive services in Student Health Centers, this could be a more in-depth study that investigates the significance of full-spectrum contraceptive services provided by Student Health Centers and the significance of these services on impact and retention of higher education students.

Conclusion

In this chapter, I highlighted the implications and findings of the study and provided recommendations for institutions of higher education, and suggestions for further research. This study highlighted the essential role of the Student Health Center as an access point for Full-Spectrum Contraceptive care in higher education and provided an understanding of factors that influence the provision of these services. Specifically, the four interrelated themes identified which impact the implementation of full-spectrum contraceptive care in the Student Health Center are: 1) Essentialization of Students and the Influence on Operationalization of Student Health Services in Regard to Full-Spectrum Contraceptive Care, 2) Fear and Discomfort as Drivers of Decisions Regarding Full-Spectrum Contraceptive Care 3) Organizational Culture and Power Dynamics and their Influence on the Implementation of Full-Spectrum
Contraceptive Care and 4) External Drivers of Decision Making in Regard to Full-Spectrum Contraceptive Care in a Student Health Center.

Given that the findings of this study point to embedded organizational and institutional practices which perpetuate reproductive health inequities in higher education, it is imperative that we view the provision of full-spectrum contraception through an equity lens. Participants in this study showed courage as they advocated with compassion and sensitivity for the needs of their students. As change agents we must individually and institutionally see, communicate about, and address inequities daily (Bensimon, Dowd, & Witham, 2016), therefore, this courage, compassion and sensitivity should harnessed and utilized to embed equity throughout our higher education institutions as we dismantle the barriers to equitable full-spectrum contraceptive care.
APPENDIX A

INTERVIEW PROTOCOL
APPENDIX A

Interview Protocol

Date:
Start Time:
End Time:
Place:
Interviewee:
Interviewer:

Confirmation of permission to record/audiotape/take notes during interview
Confirmation of IRB and informed consent

1. How would you describe the demographics of the students who access care in the student health center?
2. Can you tell me about the role of the student health center in providing access to contraception for the students?
3. What role does the provision of contraception play in encouraging student success?
4. Can you tell me about the contraceptive methods available in the student health center?
5. If the student health center did not provide contraception, would your student demographic face barriers in obtaining any contraceptive methods?
6. How does a student at Central Campus learn about the services available in the Student Health Center regarding contraception?
7. Can you describe the process a student goes through in your student health center Long-Acting Contraceptive method such as an IUC or Implant is desired?
8. Can you tell me about the process of offering contraception on the initial visit for a patient desiring contraception?
9. Has the Affordable Care Act impacted the provision of contraception in the student health center?
10. What advice you would give to a Student Health Center contemplating implementation of full spectrum contraceptive care in Student Health Centers?
11. Is there anybody else you recommend I contact regarding implementation of full spectrum contraceptive care in the student health center?
12. Would you like to elaboration or clarify any of above answers?

A final Thank You for your time and consideration.
APPENDIX B

INFORMED CONSENT
Appendix B
Informed Consent
California State University, San Bernardino

“Factors which Effect Implementation of Full Spectrum Contraceptive Care in a Student Health Center.”

CONSENT TO PARTICIPATE IN RESEARCH

PURPOSE: Under the supervision of Dr. Edna Martinez, dissertation chair, Ms. Cecile Dahlquist, doctoral student and researcher at California State University, San Bernardino, invites you to participate in a research study. The purpose of this study is to examine factors which effect the implementation of full-spectrum contraceptive care in a student health center. The Institutional Review Board at California State University, San Bernardino, has approved this study.

Expected results include a deeper understanding of qualitative factors which effect the implementation of full-spectrum contraceptive care, including intrauterine contraception, contraceptive implants, and contraceptive pills, rings, injection and condoms in a student health center.

DESCRIPTION: Ms. Dahlquist would like to ask you to participate in an interview. Your participation will require approximately 30-45 minutes. The interviews will be conducted in a format of your preference, including face-to-face, via telephone, or a face-to-face remote conversation using Skype. Additionally, the time and location of the interview will be scheduled at your convenience. With your permission, all interviews will be audio recorded.

PARTICIPATION: Your participation in the study is voluntary. You do not have to participate in this study, and you are not obligated to answer any questions you do not wish to answer. Furthermore, you may withdraw your participation in the study at any time without penalty.

PAYMENT AND COMPENSATION: Participants will not receive any type of payment or compensation for their participation.

CONFIDENTIAL: I will do everything to protect your confidentiality. Your identity will not be revealed in any dissemination of the study (e.g., articles and presentations). Both you and your institution will be assigned a fictitious name. In addition to using fictitious names, all identifying information will be further disguised. Lastly, in efforts to protect confidentiality, any data collected will be kept under lock and key and in password-protected computer files. The audio recordings will be destroyed three years after the project has ended.
**DURATION:** Your participation in the study will consist of one interview. The interview will last approximately 30-45 minutes. Ms. Dahlquist may contact you via email or telephone following the interview, with follow-up or clarifying questions. This exchange may not require more than ten minutes of your time.

**RISKS:** I do not know of any risks to you in this research study. However, answering questions about your experiences may cause some discomfort. As noted previously, you may opt-out from answering any questions or from this study. Furthermore, your name and your institution will not be identifiable by name.

**BENEFITS:** I am not aware of any benefits you may receive from participating in this study. However, the information you share through your participation in this study will contribute to a better understanding of the implementation of full-spectrum contraception in student health centers.

**AUDIO:** I understand that the interview for this study will be audio-recorded to ensure accuracy of interview notes. Initials_____

**CONTACT:** If you have any questions regarding this study, please contact Dr. Edna Martinez at emartinez@csusb.edu or 909 537-5676. You may also contact California State University, San Bernardino’s Institutional Review Board Compliance Officer, Michael Gillespie at mgillesp@csusb.edu, or 909 537-7588.

**RESULTS:** I intend to present the results of my research by submitting proposals to local, regional, and national conferences in higher education and/or healthcare. I will also look for opportunities to share my research at staff development sessions in higher education. In addition, I will seek publishing opportunities in educational and healthcare journals, and I will publish my dissertation.

**CONFIRMATION STATEMENT:**

I have read the information above and agree to participate in your study.

**SIGNATURE:**

Signature: ________________________________________________________
Date: ____________________________________________________________
APPENDIX C

INSTITUTIONAL REVIEW BOARD APPROVAL
November 4, 2019

CSUSB INSTITUTIONAL REVIEW BOARD
Expedited Review
IRB-FY2020-59
Status: Approved

Ms. Cecile Dahlquist and Prof. Edna Martinez
COE - Doctoral Studies
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Ms. Dahlquist and Prof. Martinez:

Your application to use human subjects, titled “Factors that Influence the Provision of Full Spectrum Contraceptive Care in a Student Health Center” has been reviewed and approved by the Institutional Review Board (IRB). The informed consent document you submitted is the official version for your study and cannot be changed without prior IRB approval. A change in your informed consent (no matter how minor the change) requires resubmission of your protocol as amended using the IRB Cayuse system protocol change form.

Your application is approved for one year from November 4, 2019 through --.

Please note the Cayuse IRB system will notify you when your protocol is up for renewal and ensure you file it before your protocol study end date.
Your responsibilities as the researcher/investigator reporting to the IRB Committee include the following four requirements as mandated by the Code of Federal Regulations 45 CFR 46 listed below. Please note that the protocol change form and renewal form are located on the IRB website under the forms menu. Failure to notify the IRB of the above may result in disciplinary action. You are required to keep copies of the informed consent forms and data for at least three years.

You are required to notify the IRB of the following by submitting the appropriate form (modification, unanticipated/adverse event, renewal, study closure) through the online Cayuse IRB Submission System.

1. If you need to make any changes/modifications to your protocol submit a modification form as the IRB must review all changes before implementing in your study to ensure the degree of risk has not changed.
2. If any unanticipated adverse events are experienced by subjects during your research study or project.
3. If your study has not been completed submit a renewal to the IRB.
4. If you are no longer conducting the study or project submit a study closure.

Please ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.

The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval notice does not replace any departmental or additional approvals which may be required. If you have any questions regarding the IRB decision, please contact Michael Gillespie, the IRB Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval identification number (listed at the top) in all correspondence.

Best of luck with your research.

Sincerely,

Donna Garcia

Donna Garcia, Ph.D., IRB Chair
CSUSB Institutional Review Board

DG/MG
REFERENCES


Anzaldua, G. (2002). Now let us shift...the path of conocimiento...inner works. In G. Anzaldua, & A. Keating (Eds.), The bridge we call home (pp. 540-578). New York: Routledge.


California State University, Office of the Chancellor. (Retrieved March 1, 2019). *Graduation initiative 2025.* Retrieved from The California State University: www2.calstate.edu


Center for Disease Control and Prevention. (2016, December 23). *Unintended pregnancy prevention.* Retrieved from Center for disease control and prevention:

http://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/index.htm


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Gubrium, A., Mann, E., Borroto, S., Dehlendorf, C., Fields, J., Geronimus, A., . . .


https://nces.ed.gov/fastfacts/display.asp?id=372


Rosas, R. O. (2020, 3). "Paradise...They make you feel at home": A case study on understanding the role of an undocumented student resource center and its influence on the college journey of undocumented students. Retrieved 3 2020, from CSUSB Scholarworks: Electronic Theses, Projects, and Dissertations: https://scholarworks.lib.csusb.edu/etd/966


