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**A MIXED METHODS APPROACH TO EXPLORING RELATIONSHIPS  
AMONG PROFESSIONAL PREPARATION, PROFESSIONAL  
DEVELOPMENT, AND THE IMPLEMENTATION OF SEX  
EDUCATION IN MISSISSIPPI**

Joyee Washington

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A MIXED METHODS APPROACH TO EXPLORING RELATIONSHIPS AMONG  
PROFESSIONAL PREPARATION, PROFESSIONAL DEVELOPMENT, AND THE  
IMPLEMENTATION OF SEX EDUCATION IN MISSISSIPPI

by

Joyee Loretta Esters Washington

A Dissertation  
Submitted to the Graduate School,  
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for the Degree of Doctor of Philosophy

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## ABSTRACT

The state of Mississippi has led the nation in high rates of teen pregnancy and sexually transmitted diseases among adolescents, despite mandating sex education in public schools for over a decade (SIECUS, 2011; SIECUS, 2016; SIECUS, 2017). Although studies conducted among Mississippi sex educators in the K-12 setting have shown that teachers receive very little to no professional development and desire more training, there is little supporting evidence to understand the position of professional development relative to sex education implementation in the state (Kolbo, Werle, Ismail, Arrington, Harbaugh, & Esters, 2015; Arrington, Ismail, Werle, Esters, Frederick, Ellis, & Kolbo, 2018). The purpose of this study was to use a mixed methods design to determine the relationships among professional preparation, professional development, and sex education implementation as well as to explore cultural factors that impact sex education and professional development in Mississippi.

In the quantitative study, secondary data from the 2016 and 2018 CDC School Health Profiles was used to construct a structural equation model hypothesizing that professional development acts as a moderator in the relationship between professional preparation and sex education implementation among Mississippi K-12 lead health educators. Results showed that professional development significantly strengthened the relationship between professional preparation and sex education implementation.

In the qualitative study, this relationship was further explored through a cultural lens using an autoethnographic approach. Using Chang's (2008) autoethnography methods, writing prompts were used to recollect personal memory data of my experiences of sex education as a student, instructor, and researcher. Furthermore, I

supplemented personal memory data with external interviews of other sex education leaders who also identified as native Mississippians, with field notes, and with textual artifacts. Qualitative data was collectively analyzed to determine emerging themes including need for sex education, barriers to professional development, motivation and fight, outcomes of professional development, and vision for change. Collectively, the mixed methods study provides further evidence that supports the importance of professional development in the approach to sex education.

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## DEDICATION

*This work is first and foremost dedicated to God, for without Him and His grace I would not have made it to this point. This is also for my family who never stopped believing me. To my loving husband, Tristan, thank you for sticking by me and continuing to love me through this time in our lives. To my parents, Johnnie and Garay, thank you for supporting me. To my siblings and their families, thank you for all the late night talks and encouragement. To all my family and friends, who have prayed for me over the years, thank you for lifting me up. To my ancestors, and all those who came before me, thank you for surviving through unimaginable circumstances to bring forth a life that will continue our legacy.*

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## LIST OF ABBREVIATIONS

<i>FoSE</i>	Future of Sex Education
<i>HIV</i>	Human Immunodeficiency Virus
<i>STD</i>	Sexually Transmitted Disease
<i>AIDS</i>	Acquired Immune Deficiency Syndrome
<i>WHO</i>	World Health Organization
<i>CDC</i>	Center for Disease Control and Prevention
<i>SIECUS</i>	Sexuality Information and Education Council of the United States
<i>PLSSE</i>	Professional Learning Standards for Sex Education
<i>NTPSSE</i>	National Teacher Preparation Standards For Sexuality Education
<i>SEC</i>	Sex Education Collaborative

## CHAPTER I – INTRODUCTION

Since 1991, the United States has seen an almost 15% reduction in early engagement of sexual intercourse among adolescents. In a 2017 national survey, slightly over 39% of students reported ever having sexual intercourse compared to approximately 54% in 1991. Additionally, there has been a significant decrease in the prevalence of multiple partners and a significant increase in the use of contraceptives among adolescents (Kann et al., 2018). Many of these improvements can be attributed to the implementation of policies and programs to support sex education in schools (Stanger-Hall & Hall, 2011; Santelli, Ott, Lyon, Rogers, Summers, & Schleifer, 2006).

According to the Sexuality Information and Education Council of the United States (SIECUS) (2019), sex education is a multidimensional process that informs individuals of the physical, emotional, mental, social, and spiritual impacts of sex beginning at birth and throughout life. Sex education has been shown to improve students' sexual health behaviors, decision-making, relationships, and academic performance (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). Former Surgeon General, Dr. David Satcher (2013), acknowledged the vital role of sex education in schools to improve adolescent sexual health. However, the maximum benefits of sex education are inhibited by inconsistency in state policies ranging from abstinence-only until marriage to comprehensive sex education curricula (Satcher, 2013).

Abstinence-based sex education states that the only way to fully prevent transmission of sexually transmitted diseases (STD) and unintended pregnancy is to refrain from any and all sexual activity until marriage (Santelli, Ott, Lyon, Rogers, Summers, & Schleifer, 2006). This type of sex education often includes little to no

information on contraceptives or condom use. Although several states rely on abstinence-based sex education programming, abstinence education has been shown to be ineffective in reducing rates for teen pregnancy (Stanger-Hall & Hall, 2011; Santelli, Ott, Lyon, Rogers, Summers, & Schleifer, 2006). In fact, research has reported that there is a positive correlation between abstinence-based programming and teen pregnancy rates (Stanger-Hall & Hall, 2011). On the other end of the spectrum, comprehensive sex education is more inclusive of reproduction and sexual health information.

In addition to teaching about the benefits of abstinence, comprehensive sex education focuses on communication about sex, healthy relationships, sexual health rights, contraception and condom use, and delaying sexual activity until one is ready (World Health Organization, 2018). Furthermore, comprehensive sex education programming has been shown to reduce risks of pregnancy and sexually transmitted diseases (STD) among adolescents (Stanger-Hall & Hall, 2011). Whereas critics of abstinence-based education suggest that the teaching method is unsound morally, ethically, and scientifically, it continues to be the top choice for many states including Mississippi (Santelli, Ott, Lyon, Rogers, Summers, & Schleifer, 2006; Stanger-Hall & Hall, 2011). Alternatively, those who oppose comprehensive sex education believe that more information about sex will lead to early engagement in sexual activity (World Health Organization, 2018). States that support abstinence-based education, such as Mississippi, continue to struggle with the disparity between benefits of implementing sex education and continued poor health outcomes.

In a six-year time span, 2005 to 2011, Mississippi rose from ranking sixth highest in the nation for teen pregnancy rates to ranking second in the nation. There have been



some improvements in adolescent sexual health especially since mandated abstinence-based sex education in public schools was implemented in 2011. However, Mississippi continues to lead the nation in poor health outcomes. Between 2009 and 2015, the rate of high school students reporting ever having sexual intercourse dropped from 58.2% to 44% for females and from 63.9% to 52.6% for males. During this time period, rates of students reporting being currently sexually active also dropped from 44% to 32.7% for females and from 45.9% to 35.2% for males. Despite the implementation of teen pregnancy prevention programs, mandated sex education in public schools, and lower rates of sexual activity among adolescents, Mississippi has consistently ranked high in detrimental effects of early engagement in sexual behaviors such as teen pregnancy and STDs (SIECUS, 2011; SIECUS, 2016; SIECUS, 2017).

The Mississippi Youth Risk Behavior Survey (YRBS) reported that in 2015 over 40% of female high school students and over 50% of male high school students had ever engaged in sexual intercourse. This report also stated that over 80% of both female and male high school students had never been tested for human immunodeficiency virus (HIV) (Mississippi State Department of Health, 2015). In 2015, Mississippi ranked as one of the highest states in the nation for teen birth rate as well as reported cases of chlamydia, gonorrhea, and syphilis among ages 15-19. Moreover, the rates of HIV and AIDS among adolescents ages 13-19 were more than three times the national average in 2015. In an effort to address these alarming statistics, Mississippi legislators renewed the house bill that mandates Mississippi public schools to adopt either an abstinence only or abstinence plus sex education curriculum (SIECUS, 2017). Although the state law is clear

on expectations of sex education curriculum, it is not clear on the expectations and requirements of those who teach sex education.

According to Mississippi state law, teachers are not required to receive professional development on a regular basis or to be evaluated on sex education teaching proficiency (Miss. Code Ann. § Code 37-13-171, 2016). Although the state law mandates the content of sex education, the lack of regulation and support for training suggests that teachers are primarily dependent on themselves for preparing to teach sex education and making decisions about methods or strategies that guide how sex education is taught. The result of insufficient knowledge, skills, and behaviors as well as an over-reliance on personal and cultural influences, could negatively influence both the teaching and learning environment (Kehily, 2002; Blinn-Pike, 2008; Beyers, 2012; Beyers, 2013; ). Studies on state policies have indicated that lack of professional development and teacher preparation may be barriers to improved implementation of sex education (Arrington, Ismail, Werle, Esters, Frederick, Ellis, & Kolbo, 2018).

A study conducted by Kolbo, Wele, Ismail, Arrington, Harbaugh, and Esters (2015) at The University of Southern Mississippi, evaluated sex-related education policies and practices by collecting data from sex-related education instructors across the state. Results showed that instructors were more likely to cover topic areas in which they had received professional development. Slightly over 18% of respondents indicated that they received over eight hours of professional development whereas approximately 46% received 8 hours or fewer and 35% received no professional development. When asked for suggestions on how to make sex-related education more effective, the most frequent response was training for sex-related education instructors (Kolbo, Werle, Ismail,

Arrington, Harbaugh, & Esters, 2015; Arrington, Ismail, Werle, Esters, Frederick, Ellis, & Kolbo, 2018). Focusing on teacher training may strengthen the quality of sex education as teachers often lack professional training and skills to teach sex education courses.

Sex educators face many unique barriers including but not limited to, addressing sensitive and controversial information, lack of administrative support, and lack of professional development opportunities. (LaChausse, Clark, & Chapple, 2014; Ollis, 2010; Wight & Buston, 2003). This often reduces the quality of sex education and jeopardizes curriculum fidelity. In 2014, the National Teacher Preparation Standards for Sexuality Education (NTPSSE) were created by the Future of Sex Education (FoSE) Initiative to improve the quality of sex education and provide consistent implementation across the nation (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). The purpose of these standards was to strengthen training for sex education curricula across the board through professional preparation during pre-service training. In 2017, multiple organizations that support sex education training for teachers established the Sex Education Collaborative (SEC) to improve the quality of sex education through the development of Professional Learning Standards for Sex Education (PLSSE). The PLSSE used the NTPSSE as a foundation to provide guidance for professional development. PLSSE standards may be used to inform teachers of current teaching practices, plan and implement professional development opportunities, and assess proficiency of teachers (Sex Education Collaborative, 2018). Yet, Mississippi does not currently follow any national standards for professional preparation or professional development in sex education, posing a serious threat to sex education implementation and health outcomes.

In 2019, Mississippi continued to rank second in the nation for teen birth rate although the percentage of high school students who ever engaged in sexual intercourse continued to decrease since 2015, from 52.6% to 44.8% for males and from 44% to 38.2% for females (CDC, 2019). Since 2015, there has also been a decrease in HIV testing (4.8%) and condom use (7.4%) as well as an increase in not using any method to prevent pregnancy (4%) (CDC, 2019). With the sex education bill renewed in 2021, with very little to no change from the original law mandating sex education 10 years ago, Mississippi may continue to see trends that do not reflect significant improvement if elements of sex education implementation are not closely examined including professional development and professional preparation of teachers.

#### Problem Statement

In other studies, professional preparation and professional development have been shown to improve knowledge, skills, and behaviors of sex education instructors. This leads to improved implementation and positive health and academic outcomes for students. However, the quality of sex education is not only dependent on recognizing trends in sexual behaviors among adolescents, but also on understanding the relationships among professional preparation, professional development, and implementation in Mississippi. This information may help determine what is needed to provide adequate training that will lead to meeting teacher needs and adherence to sex education policy. There has been very little research on the relationships among professional preparation, professional development, and sex education implementation in Mississippi. Furthermore, little is known about cultural factors impacting sex education, as Mississippi is located in the rural southern United States. As a native Mississippian (as

defined as born and primarily residing in the state), exploring my own experiences as a sex education leader can expose cultural elements as well as barriers to and potential outcomes of professional development, that could lead to improved sex education implementation and positive outcomes.

### Purpose Statement

The purpose of this study is to (1) determine the relationships among professional preparation, professional development and sex education implementation and (2) explore my experiences as a native Mississippian sex education leader including potential barriers to and outcomes of professional development for sex education instructors.

Determining the relationships among professional preparation, professional development, and sex education implementation will provide data on how teacher training impacts sexual health topics taught, student assessment, and increasing student knowledge. Exploration of my experiences will provide insight into how sex education is impacted by cultural factors as well as identify barriers to and potential outcomes of professional development for teachers. The following research questions will guide the study:

1. What are the relationships among professional preparation, professional development, and sex education implementation in Mississippi?
2. How have my experiences as a native Mississippian sex education leader and cultural factors influenced sex education and professional development efforts?
3. What are barriers to professional development in sex education in Mississippi?

4. What are outcomes to professional development in sex education in Mississippi?

Justification

Determining relationships among professional preparation, professional development, and sex education implementation as well as exploring sex education leaders' experiences and beliefs about barriers and potential outcomes of professional development has benefits on multiple levels. On state, district, and school levels, benefits include not only improvement in the quality of sex education, but also increased adherence to policies. With administrative support for professional development, teachers would be more likely to know the policy and follow guidelines in order to meet both state and national requirements. Schools may also benefit from strengthened curriculum fidelity as a result of professional development and training for teachers. Furthermore, teachers could be more consistent in teaching strategies across Mississippi when implementing sex education (Elfers, Carlton, Gibson, Puffer, Smith, & Todd, 2014). Other primary benefits for teachers are increasing knowledge and skills, becoming more comfortable with sex-related topics, and feeling more prepared to teach sex education courses.

As a conceptual framework, teachers who have received adequate pre-service training in addition to professional development may become more prepared. This may potentially lead to increased confidence in teaching the material, which not only benefits the teacher, but also the students as they receive higher quality sex education. As a result, a more confident teacher can establish a classroom environment conducive to effectively implement sex education, in which students can increase their knowledge, receive

accurate information, and improve sexual health (Warwick, Aggleton, & Rivers, 2005; Wight & Buston, 2003). Research on professional development can lead to effective implementation of sex education in the classroom and other levels. Insight into the impact of professional development could lead to policy change in relation to evaluation of teachers and the sex education policy as well as inform practice. By gathering data to identify the position of professional development, both quantitatively and qualitatively, objectives and guidance for sex education training can be expanded to meet the needs of Mississippi sex educators.

#### Delimitations

The secondary data analyzed includes a representative sample of Mississippi sex educators of public middle and high schools. Therefore, the results may not be generalizable to sex educators and students in public schools or sex educators outside of Mississippi. Furthermore, since this study relies on previously collected self-reported data, responses may be affected by biases, such as response bias or social desirability bias. Qualitative data for this study is not generalizable as this is based on the researcher's personal experiences.

#### Definition of Terms

*Native Mississippian:* a person who is born in the state of Mississippi and primarily resides in the state throughout life.

*Sex education leader:* a person who is actively engaged and advocates for sex education professionally including but not limited to research, training, and administration or management of programs.

*Sex education:* a multidimensional process that informs individuals of the physical, emotional, mental, social, and spiritual impacts of sex beginning at birth and throughout life (SIECUS, 2019)

*Professional preparation:* formal pre-service training typically through higher education resulting in a professionally recognized degree or certification (Hammig, Ogletree, & Wycoff-Horn, 2011; Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014; Eisenberg, Madsen, Oliphant, Sieving, & Resnick, 2010; Clayton, Brener, Barrios, Jayne, & Jones, 2018)

*Professional development:* an opportunity for teachers to stay up to date on relevant information and strengthen skills through workshops, seminars, and other short-term trainings; may contain similar experiences or knowledge to professional preparation (Scott, 2013; LaChausse, Clark, & Chapple, 2014; Clayton, Brener, Barrios, Jayne, & Jones, 2018)

*Abstinence education:* states that the only way to fully prevent transmission of sexually transmitted diseases and unintended pregnancy is to refrain from any and all sexual activity until marriage (Santelli, Ott, Lyon, Rogers, Summers, & Schleifer, 2006)

#### Assumptions

It is assumed that sex education will continue to be an important part of Mississippi public school education as the law will be in effect at least until 2024. It can also be assumed that the sample is representative of the population as all participants were lead health educators in Mississippi. Since this study is self-reported secondary data, it is assumed that the data reported is accurate. Random sampling techniques were



used in the collection of secondary data; therefore, it is assumed that participants did not repeat the survey in consecutive years of survey administration.

## CHAPTER II – REVIEW OF THE LITERATURE

Sex education courses are taught around the world with the intention of informing school-aged children, particularly adolescents, about various aspects of sexual health and reproduction. Whereas approaches to sex education differ across the nation on regional, state, and district levels, common goals are to reduce risks for teen pregnancy and sexually transmitted diseases (STD) as well as improve the sexual health of adolescents. This often results in teachers addressing topics such as intercourse, anatomy and physiology, sexual maturity, healthy relationships, contraception, pregnancy, human immunodeficiency virus (HIV), acquired immune deficiency syndrome (AIDS), and other STDs (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). In the United States, sex education has evolved from being rarely discussed to being required by state laws and school districts (Huber & Firmin, 2014). The evolution of sex education over the past century has resulted in policy changes as well as the formation of standards and competencies to improve teacher training and the quality of sex education. Although sex education has become more widely accepted, challenges continue to exist for teachers (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014; Zimmerman, 2015).

### History of Sex Education in the United States

Prior to 1900, sex was rarely discussed in general, but was deemed especially inappropriate in the school setting (Huber & Firmin, 2014). In the early 1900's, parents were viewed as the primary authority to teach their own children about sex. Many teachers who tried to address information related to sex not only lacked skill, but were also viewed as morally inept and often risked losing their jobs. Although most parents did not have the necessary information to provide their children about sex, teaching children

about sex in schools violated the trust of parents and the community. Parents felt that they should be in control of when, where, and how their child heard about sex. Therefore, many teachers chose not to address sex in the classroom (Zimmerman, 2015).

Furthermore, discussion of sex outside of marriage was frequently associated with moral decline and the Comstock laws were passed to prohibit the distribution of any literature related to sex (Huber & Firmin, 2014; Zimmerman, 2015).

Between 1912 and 1914, resolutions were passed by the National Education Association to support incorporating sex education in schools, however, the implementation set to occur in schools failed due to protests. Those who supported sex education learned from this experience and developed different ways to include sex education in classrooms (Huber & Firmin, 2014). Between 1920 and 1960, the need for sex education grew, leading to the development of family life education, which also included focusing on character building, relationships, marriage, and parenting. Sex education was heavily influenced by the sexual revolution of the 1960s and 1970s, which was grounded in the freedom of expression and pleasure (Huber & Firmin, 2014; Zimmerman, 2015). Despite a growing awareness of the need for sex education in schools, teachers continued to struggle with discussing sex-related topics in the classroom.

In the early 1960's, after a teacher was fired for discussing sex in the classroom, a U.S. court judge stated in his ruling that only individuals certified and competent to teach sex education should do so. However, during this time there was no professional training or certification required for individuals teaching sex education (Zimmerman, 2015). As time progressed, teen birth, teen pregnancy, STDs, and HIV/AIDS created more social,

economic, and health problems across the globe. It became more apparent that sex education was essential to contribute to the growth, development, and knowledge of adolescents (Huber & Firmin, 2014; Zimmerman, 2015). By the late 1960s, professional organizations such as the National Organization for Women, the Sexuality Information and Education Council of the United States (SIECUS), and the American Association of Sex Educators and Counselors and Therapists (Huber & Firmin, 2014) began to emerge and set quality standards for sex education. The 1980s, referred to as the modern sex education era, focused on the rise of discussing safe sex practices as opposed to abstinence education (curriculum focused on refraining from sex until marriage), which became particularly important with the discovery of HIV. Over time, various presidential administrations funded policies and programs to support sex education such as the Adolescent Family Life Program, Welfare Reform Act, and the Community Based Education Program (Huber & Firmin, 2014). Currently, comprehensive sex education, a curriculum inclusive of marginalized populations such as the LGBTQ community and the use of contraceptives, is on the rise as an alternative to abstinence education in schools (Huber & Firmin, 2014; Zimmerman, 2015).

Even though the perception of the role of teachers in sex education has changed over the past century, the lack of professional training has remained constant. Although state laws have been passed to mandate sex education in public schools, teachers continue to receive little to no professional training for sex education. The question of *if sex education should be taught* has become less of a controversial issue over the years. Now, the question of concern is *how sex education should be taught* and how do teachers become prepared to address sex education in the classroom (Zimmerman, 2015). For

many schools, a sex education curriculum is provided that supports the state policies, whereas other schools do not have access to resources for a well-developed sex education program. Limited resources for teachers have led to poor quality of sex education, as teachers do not always have the knowledge, skills, or confidence necessary to teach sex education (Rhodes, Kirchofer, Hammig & Ogletree, 2013). However, in recent years, professional preparation standards and related competencies have been established to improve the quality of sex education.

### Teacher Preparation Standards and Competencies

A majority of states require some type of sex education curriculum in public schools. Depending on geographical region in the United States, policies differ ranging from abstinence-only education to comprehensive sex education, thus leading to varied quality in sex education and teacher preparation (Stanger-Hall & Hall, 2011; Santelli, Ott, Lyon, Rogers, Summers, & Schleifer, 2006). The establishment of the National Teacher Preparation Standards for Sexuality Education (NTPSSE) was intended to create consistent, quality sex education across the nation (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). The Future of Sex Education Initiative (FoSE) is a partnership between Advocates for Youth, Answer, and the Sexuality Information and Education Council of the United States (SIECUS). The purpose of FoSE is to improve the quality of sex education in the United States by developing national sexuality education standards, improving implementation of sex education, expanding sex education policy, and elevating sex education as a priority.

In 2014, FoSE developed NTPSSE to strengthen higher education training programs for teachers by focusing on professional disposition, diversity and equity,

content knowledge, legal and professional ethics, planning, implementation, and assessment. Although FoSE is directed towards comprehensive sex education, the teacher standards are not specific to any type of sex education (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). The standards and tools are designed “to provide guidance to programs within institutions of higher education in order to better prepare undergraduate pre-service students to deliver sexuality education” (FoSE, 2014, p.3). However, these standards may be used as a guide for other professional training programs to ensure that competencies are met and individuals are qualified to teach sex education not only in the United States, but also around the world (FoSE, 2014; Fisher & Cummings, 2016). Even though research studies have shown the importance of standards, the development of standards or competencies is an extensive process that depends on collaborative efforts.

According to Barr, Goldfarb, Russell, Seabert, Wallen, and Wilson (2014), the development of the NTPSSE involved an advisory committee composed of experts in sex education, health education, higher education, and multiple state, national, and government agencies. Members of the advisory committee reviewed literature and existing professional standards from other health education organizations. NTPSSE standards and indicators for sex education were drafted and revised during multiple rounds with subpanels. The final product resulted in seven standards and 31 indicators that represented the knowledge, skills, and behaviors of competent sex educators (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014).

In another article, Elfers, Carlton, Gibson, Puffer, Smith, and Todd (2014) described the development of core competencies for California sexual health educators and other adult professionals who are impacted by adolescent sexual health. According to

the authors, in order to inform adolescents about sexual health, professionals such as educators, health providers, and social workers should be trained and share a common language, thus stressing the importance of collaboration. Furthermore, continuous training and education is important to provide consistent methods and techniques for teaching sex education (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014; Elfers, Carlton, Gibson, Puffer, Smith & Todd, 2014; Fisher & Cummings, 2016). The California Adolescent Sexual Health Work Group collaborated with other local agencies to develop a set of core competencies that would set a professional standard and increase the quality of sex education. The process to develop the core competencies included engaging partnering agencies, forming subcommittees, drafting a document, submitting the document for practitioner review, revising the document multiple times, conducting a survey to acquire feedback on the revised document, and using feedback to create the final revision. The final document included 52 competencies across five domains that addressed the professional and legal role, adolescent development, youth centered approach and youth culture, sexual and reproductive health, and pregnancy/STIs/HIV. Additionally, a Performance Assessment and Human Resources Toolkit was developed for educators and administrators to focus on and improve self-assessment, performance appraisal, staff development and training, recruitment and hiring, and program development and collaboration (Elfers, Carlton, Gibson, Puffer, Smith & Todd, 2014).

A strategic plan and collective efforts are common among articles that focus on cohesively developing standards and competencies. Although these articles contained a detailed explanation of the process of development, the authors did not address the assessments that led to the development of these standards and competencies nor any

evaluation efforts to determine the effectiveness of standards and competencies. Yet development of program standards and competencies is critical to improving quality of teacher preparation, and an assessment of current teacher knowledge, skills, and behaviors may lead to better understanding needs of educators and ensure that standards are adequately met.

In Fisher and Cummings' (2016) study with Rhode Island teachers, participants were asked about their confidence, ability, and proficiency in teaching sex education and meeting the seven national teacher preparation standards set by FoSE. According to results, for meeting each national teacher preparation standard, up to 39% reported fair/poor in proficiency. Although 50% to 77% of participants reported that they were proficient in each standard, the study did not collect data on teachers' actual performance in meeting standards by assessing the 31 indicators. A key finding of this study also indicated that teachers who completed a college course based on sex education were more confident in teaching sex education topics compared to teachers who had received no training on a collegiate level (Fisher & Cummings, 2016).

This is consistent with data indicating that teachers who are professionally trained are more prepared to teach sex education (Hammig, Ogletree & Wycoff-Horn, 2011; Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). In another study, it was reported that those who were professionally prepared were more likely than others to address peer pressure, relationships, influencing healthy decisions, abstinence, and human development. Teachers who were not professionally prepared were less likely to discuss issues surrounding contraceptives and gender identity (Rhodes, Kirchofer, Hammig, & Ogletree, 2013).



Standards are not only having an impact on a national level, but also on a global level. Collier-Harris and Goldman (2017) compared the professional standards for educators between Australia and the United States. The purpose of this study was to compare the Australian professional standards for general teachers and the US professional standards for sex educators established by FoSE. This comparison was designed to determine how knowledge, skills, and competencies related to how teacher preparation standards might be applied to relationships and sex education in Australia. This study used a case study design that focused only on comparing the content of the standards between sex education teacher preparation standards of the US and Australian Professional Standards for Teachers. The study did not consider the effectiveness or implementation of US standards. Findings showed that characteristics of the seven Australian standards (consisting of 37 foci) compared to the 31 indicators in the US standards were similar. Based on this information, the authors concluded that Australian professional standards could be used to construct more specific standards for sex educators. By reaching a global audience, the task to create awareness and stimulate dialogue surrounding the standards is in progress (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014).

### Sex Education and the Teacher Experience

In implementation of standards and competencies, it may be important to not only recognize the impact of teacher experience, but also the impact of organizational policy and controversial topics, culture and community identity, and professional development on sex education. Sex is often perceived as a sensitive subject due to its intimate and personal nature. It is often difficult for adults to hold conversations with one another

about sex, and can be even more difficult to explain sexual topics to children (Ashcraft, 2012). Teachers who have not been equipped with all the tools necessary to provide instruction on sex education may experience several challenges due to lack of knowledge and training as well as limited access to resources. (Tietjen-Smith, Balkin, & Kimbrough, 2014; Rhodes, Jozkowski, Hammig, Ogletree, & Fogarty, 2014). It has been shown that individuals with less training related to sex education also tend to be less comfortable with the subject matter (Tietjen-Smith, Balkin & Kimbrough, 2014). In addition to lack of training, comfortableness in teaching sex education may result from a number of factors including personal experiences.

### *Personal Experience*

Personal experiences of the teacher should be taken into consideration as it impacts pedagogy (Kehily, 2002). Personal beliefs, attitudes, and past experiences of the educator can affect the teaching strategies and student experiences in sex education classrooms. Teachers who have not reflected on how their personal beliefs, attitudes, and past experiences shape their teaching strategies risk projecting their ideas onto students without fully exploring the context in which they teach (Kehily, 2002; Beyers, 2012; Beyers, 2013).

Kehily (2002) interviewed four teachers and a school nurse on their personal perspective in terms of how educators learned about sex and how their teaching has been impacted by their biography. As a result of gaining insight into their identities, experiences, biographies, and teaching practices, Kehily found that identity was connected to teaching methods, personal sexual biographies and experiences influence views on sexual education, sexual diversity is a challenging issue, and teacher-student

relationships are affected by school structures as well as language and identity. Kehily concluded that personal experiences of teachers impacts pedagogy and must be taken into consideration. Similarly, Beyers (2013) explored the relationship between personal influences of sex education teachers and how they teach sex education. Using a participatory research approach, participants reflected on past experiences that have shaped their views on sexual behavior. By using critical thinking, problem solving, and communication skills, participants concluded that their own past experiences should not interfere with providing a well-rounded and healthy perspective of health education. Therefore, teacher perspective and reflection on past experiences is critical for advancing how sex education is taught (Beyers, 2013; Beyers, 2012; Kehily, 2002).

Reflecting on personal experience is particularly important when differentiating opinion from fact and fostering decision-making skills for the student as it relates to his or her own beliefs about sexuality and sexual health. When sex education is taught from the perspective of what the teacher believes is important as opposed to what the student actually needs, the gap between knowledge and practice widens. In order to narrow the knowledge/practice gap, Beyers (2012) claimed that teachers should make students' needs a priority and set aside their own views about sexuality and sexual health.

#### *Organizational Policy and Controversial Topics*

Teachers encounter other specific barriers to sex education that not only result in a difficult time relaying information and messages about sex to students, but also are compounded by the challenging task of addressing controversial issues in the classroom (Walter & Hayes, 2007). Organizational policy and controversial issues can restrict what is taught in the classroom and may conflict with the educators' personal beliefs.

Eisenberg, Madsen, Oliphant, and Sieving (2013) identified barriers to teaching sex education by conducting a survey among Minnesota sex educators. Results showed that although teachers believed controversial topics should be included in the curriculum, these subjects, in practice, were avoided. Furthermore, approximately 25% of participants identified school or district policy as a barrier to teaching sex education. Many school policies are established to uphold a distinct position against homosexuality, abortion, contraception, and pregnancy outside of wedlock and in some cases prevent teachers from addressing these topics in the classroom at all. This is especially the case for abstinence-only or abstinence-plus school settings that promote waiting until marriage to have sex (Gill, 2015). Additionally, individuals who teach sex education may find themselves in the position in which personal beliefs do not coincide with organizational mandates. Furthermore, teachers are not trained on how to balance professional values with organizational mandates (Williams & Jensen, 2016).

Williams and Jensen (2016) found that approximately 44% of participants expressed some feeling of conflicted identification between what they personally/professionally believed should be taught and what was mandated. This situation adds stress to the teaching environment for both the educator and the student. It has been shown that individuals who experienced conflict between their personal beliefs and organizational mandates expressed feelings of inauthenticity, concern for job security, and fear of angering organizational stakeholders (Scott, 2013; Williams & Jensen, 2016). Tackling controversial issues requires a delicate balance of personal, religious, political, and scientific values (Walters & Hayes, 2007).

### *Culture and Community Identity*

Along with organizational policies, teaching strategies and decisions are also influenced by community identity. Sex education differs based on geographic location and culture of the area. Community identities greatly impact decisions about sex education, particularly when comparing rural and urban experiences or expectations (Blinn-Pike, 2008; Jones, Jensen & Selzer King, 2014). According to DePalma and Francis (2014), cultural context has several implications in the classroom. In a study conducted in South Africa, culture and language were used to prevent further discussion on topics challenged by students and served as an authoritative force in student-teacher interactions and discourse. Culture can create a challenging environment to teach sex education and highly influence dialogue about sex education in the classroom by setting the tone and direction for the learning process (DePalma & Francis, 2014). In the United States, rural and urban communities differ based not only on culture, but also on several other factors such as demographics, crime and violence statistics, religious views, political views, and social climate (Blinn-Pike, 2008). These factors may lead to differences in how urban and rural communities address adolescent sexual health and sex education. When comparing urban and rural school settings, there are a few studies that identify the impact of the rural setting on sex education (Jones, Jensen, & Selzer King, 2014).

Blinn-Pike (2008) examined perceptions of sex educators teaching in rural southern communities in the United States. Results showed that most educators believed that rural and urban teachers and administrators were similar in sharing a genuine concern for the health and well-being of their students. Educators thought that rural and

urban teachers were different due to uniqueness of the rural setting, advancements of urban schools, close-knit environment of the rural community, lack of supervision in urban schools, and the progressiveness of urban schools. Although rural and urban administrators were said to be alike in the need for community acceptance, they are different due to more direct community contact, religious influence, and fear of negative repercussions from the community in rural settings (Blinn-Pike, 2008). The author concluded that community identities greatly impact decisions about sex education.

Consistent with these findings, Jones, Jensen and Selzer King (2014) recruited over 25 participants to gather information on future sex educators' expectations regarding sex education in rural communities. Findings indicated that future sex educators believed that rural communities were less diverse than urban communities, which would result in more positive experiences in urban settings. Participants also reported rural communities had a more conservative, less progressive worldview than urban communities, which would restrict sex education. Furthermore, participants believed that rural communities have less access to information and this could also affect the teaching experience. The authors concluded that professional development and extensive training in both urban and rural settings could help sex educators understand how community identity affects educational opportunities (Jones, Jensen, & Selzer King, 2014). Community identity not only influences teaching strategies, but also creates barriers such as parental approval, religious or cultural barriers, school administration approval, and addressing personal concerns of students (Eisenberg, Madsen, Oliphant, & Resnick, 2011; Eisenberg, Madsen, Oliphant, & Sieving, 2013).

### *Professional Development*

Although teachers face several barriers in sex education, these challenges are often attributed to lack of training and professional development. Throughout the literature, research studies have made a distinction between professional preparation and professional development. Professional preparation involves formal pre-service training typically through higher education resulting in a professionally recognized degree or certification (Hammig, Ogletree, & WycOFF-Horn, 2011; Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014; Eisenberg, Madsen, Oliphant, Sieving, & Resnick, 2010; Clayton, Brener, Barrios, Jayne, & Jones, 2018). Professional development provides an opportunity for sex education teachers to stay up to date on relevant information and strengthen skills through workshops, seminars, and other short-term trainings (Scott, 2013; LaChausse, Clark, & Chapple, 2014; Clayton, Brener, Barrios, Jayne, & Jones, 2018). Professional preparation and development not only increase knowledge and skills, but also confidence for teaching sex education (Tietjen-Smith, Balkin, & Kimbrough, 2014; Clayton, Brener, Barrios, Jayne, & Jones, 2018;).

Generally, teachers are expected to participate in professional development programs to improve their teaching strategies and methods. However, these regulations rarely apply to sex education teachers in the United States, as professional standards and evaluation are not priority (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). Lack of professional development also leads to low curriculum fidelity, which impacts the effectiveness of evidence-based programming (LaChausse, Clark, & Chapple, 2014).

Professional development has the potential to not only increase knowledge, skills, and confidence, but also serves as a way to provide consistency in teaching sex

education and techniques to address controversial issues (Walter & Hayes, 2007). Ollis (2010) evaluated the professional development component of the Talking Sexual Health (TSH) program and assessed personal barriers to attitude change among sex education teachers especially in regard to sexual diversity. Secondary teachers who taught sex education were asked to participate in a two-day training that would provide the knowledge and skills necessary to address gender issues and sexual diversity. Teachers indicated that the training was valuable in assessing personal values, becoming equipped with the tools necessary to change their attitudes and practices, and becoming aware of sexual diversity issues in the process (Ollis, 2010). Other studies have shown that teachers believed training programs were valuable because they became not only more comfortable and confident in teaching the material, but also became familiar with the activities, and could appreciate the methodology behind the program as well as experience greater motivation and social support (Wight & Buston, 2003).

In a research study that used a qualitative approach to understand the experiences of pre-service training teachers in Minnesota, teachers acknowledged that sex education was an expectation of their jobs, but there were still times when teachers felt uncomfortable or embarrassed by the subject matter and experienced lack of training to teach sex education (Eisenburg, Madsen, Oliphant, Sieving, & Resnick, 2010). Therefore, teachers desired more information and training to become adequately prepared to teach sex education. This not only included sex education content, but also culturally appropriate resources and information on how to address political and controversial topics in the classroom (Eisenburg, Madsen, Oliphant, Sieving, & Resnick, 2010).



Based on the information from the 2010 study, the following year, Eisenburg, Madsen, Oliphant, and Resnick (2011), published an article that determined differences in teaching sex education compared to other subjects. Differences included extensive interaction with parents such as approval for the child's participation in the class, addressing religious or cultural barriers, approval from school administration on what material to include in curriculum, and fears of negative consequences that could result from teaching material that is not in line with school policies. Teachers also reported dealing with sensitive information that could lead to controversy and personal concerns for students. The authors suggested that since sex education is a naturally evolving topic, teachers must stay up to date on current information and consider the needs of their students. The study concluded that this information has the potential to inform trainings for teachers and improve the quality of sex education. Sex education is not held to the same standards as other courses, which can be detrimental to instructors, administrators, students, schools, and communities. This study focused more on teaching experiences and did not specifically focus on the professional development aspect, but the data collected shows that training can help alleviate some of these challenges especially when teachers are not trained to teach sex education, but rather are asked to incorporate sex education into their other responsibilities (Eisenberg, Madsen, Oliphant, & Resnick, 2011). Both studies concluded that professional training is necessary and has the potential to greatly impact the teaching experience and the student experience (Eisenburg, Madsen, Oliphant, Sieving, & Resnick, 2010; Eisenberg, Madsen, Oliphant, & Resnick, 2011).

Teachers have expressed benefits of participating in professional development activities because they report gaining recognition, confidence, learning skills, social

support, financial support, and increased motivation (Walker, Green, & Tilford, 2003; Wight & Buston, 2003; Warwick, Aggleton, & Rivers, 2005). According to Fisher and Cummings (2016), over 60% of teachers reported that they had explored professional development opportunities and 90% were interested in seeking additional professional development. In an evaluation of a training program for school teams that deliver a sex education program, findings showed that the training program resulted in improved confidence levels of team members, awareness of various teaching strategies, cohesion among team members, team development, and the need to involve parents (Walker, Green, & Tilford, 2003). Effective professional development includes a collective effort to increase knowledge, skills, and confidence by providing consistent methods and techniques for teaching sex education (Elfers, Carlton, Gibson, Puffer, Smith, & Todd, 2014).

In 2019, the Sex Education Collaborative (SEC), released the Professional Learning Standards for Sex Education (PLSSE) to guide professional development for sex education teachers. Similar to the development of NTPSSE, multiple agencies collaborated to form the SEC and work to improve the quality of sex education. The NTPSSE was also used as a foundation to create the PLSSE. This document consisted of four domains including (1) context for sex education, (2) professional disposition, (3) best practices for sex education, and (4) key content areas, which are also organized into topics and indicators. A few of the topics include values, disclosure, racial and reproductive justice, effective teaching strategies, responding to challenging questions, healthy relationships, consent, interpersonal and sexual violence, LGBTQ+ identities, puberty and adolescent development, contraception, pregnancy, reproduction, HIV, and

other STDs and infections. The PLSSE may be used to plan and implement professional development opportunities. Additionally, the SEC has created an assessment tool for teachers to determine areas of improvement based on the PLSSE (SEC, 2018).

Several studies focus on the impact of professional development on sex education, but there are currently no studies on the impact of PLSSE. Previous studies reinforce the need and desire of teachers to improve the quality of sex education through professional development and the meeting of national standards. Professional development is also valuable in assessing personal values and becoming equipped with the tools necessary to change attitudes and practices as well as becoming aware of sexual diversity (Ollis, 2010).

#### Sex Education Policy and Adolescent Sexual Health in Mississippi

Increasing opportunities for professional development and training has the potential to improve the quality of sex education and equip teachers to address the many challenges faced in the sex education classroom, particularly in Mississippi. The Youth Risk Behavior Surveillance System (YRBSS) consists of self-reported data from adolescent youth about various health behaviors including sexual health (Mississippi State Department of Health, 2015). According to 2009 data from the Mississippi Youth Risk Behavior Survey, it was reported that over 50% of female students and over 60% of male students in Mississippi high schools, had ever engaged in sexual intercourse. Furthermore, 30% of male Mississippi high school students reported having had at least four sexual partners, which was almost twice as high as the national average for high school males in 2009. Around this time, Mississippi led the nation in teen birth, teen pregnancy, HIV/AIDS, chlamydia, gonorrhea, and syphilis rates (SIECUS, 2010; Eaton,

Kann, Kinchen, Shanklin, Ross, Hawkins, Harris, Lowry, McManus, Chyen, Lim, Whittle, Brener & Wechsler, 2010). In an effort to combat the health, social, and economic problems of early engagement in sexual activity, Mississippi legislators acknowledged the importance of sex education in schools.

In 2011, legislation was passed to mandate sex education in public schools for the first time in Mississippi. The law, House Bill 999, required each school district to adopt an abstinence-only or abstinence-plus (allows for limited discussion of contraceptives) sex education policy. Both sex education curricula were required to address topics related to the benefits of abstaining until marriage, the consequences (social, psychological, physical, and financial) of not abstaining until marriage, unwanted sexual advances (including the role of drugs and alcohol), prevention of pregnancy and STDs, and state laws related to illicit sexual acts (i.e. rape). The law further stated that abortion should not be taught as a method for ending pregnancy, contraceptive use must be discussed in the context of failure rates, and any demonstration of contraceptive use including condoms was strictly prohibited (SIECUS, 2013; MS House Bill 999, 2011). A critical component of this sex education policy was assessment and evaluation of implementation.

One particular section of the law included establishment of the Teen Pregnancy Prevention Task Force, which was created to routinely review and evaluate legislative efforts to implement sex education policy through various services and programs. Not only was the task force to provide annual reports of recommendations to improve legislative efforts, but also to review plans, services, and studies, evaluate school districts and effects of policy, and work with state services to conduct studies on community

programs (MS House Bill 999, 2011). As a result, research was conducted through the Implementation of Sex-Related Education Policy (ISREP) survey, which was administered to middle school and high school principals in Mississippi. The ISREP survey covered several topics including but not limited to curriculum, professional development, policy adherence, resources, and challenges to implementation. According to the data, most individuals responsible for teaching sex education were health education teachers, school nurses, and physical education teachers and over 70% of these sex education teachers received professional development (Kolbo, Werle, Harbaugh & Arrington, 2012). Whereas this study assessed implementation of the policy, it did not address the teacher perspective on professional development and did not report data on how often professional development was received or the quality of professional development. Furthermore, the study was limited because principals may not have had direct interaction or experience in the classroom to accurately report on effects of the sex education policy. Evaluations were revised to collect more data on professional development from the teacher perspective.

Four years after the implementation of House Bill 999, rates of reported sexual intercourse and number of sexual partners among high school students had decreased. However, despite reductions in teen pregnancy, teen birth, and STD transmission, Mississippi continued to rank high in these categories compared to other states and to exceed national averages (Mississippi State Department of Health, 2015; SIECUS, 2017). In 2015, a second evaluation was conducted of sex-related education policies and practices in Mississippi. One key difference between the ISREP survey and the 2015 evaluation was that sex-related education instructors, rather than principals, were

participants. Additionally, the study included quantitative and qualitative data, thus providing more information about the teacher experience, professional development, and the effect of policy in the classroom. Consistent with the ISREP study, primarily health education teachers, physical education teachers, and school nurses were responsible for teaching sex education. In the additional data, it was reported that professional development or training mainly consisted of workshops, seminars, and conferences. However, a majority of respondents reported that they received eight hours or fewer of professional development or training related to sex-related education per year. Over 30% of respondents reported receiving no professional development or training. According to quantitative data, approximately 60% of teachers were more likely to cover content areas in which they had received professional development such as consequences of not abstaining, benefits of abstinence, and how to handle unwanted sexual advances. In contrast, it was reported that more controversial and sensitive topics such as contraceptives, abortion, and the current state law related to sexual conduct, were less likely to be addressed through professional development and also less likely to be taught in class. Teachers stated that they needed more professional development and they identified barriers to professional development that included cost, lack of administrative support or approval, and availability of training (Kolbo, Werle, Ismail, Arrington, Harbaugh & Esters, 2015; Arrington, Ismail, Werle, Esters, Frederick, Ellis & Kolbo, 2018).

The relationship between professional development and coverage of content areas has also been shown in other studies based on national data. Although the national data does not address barriers to professional development or the impact of national standards,

it does conclude that health and sex education topics covered in professional development were also more likely to be covered in class (Clayton, Brener, Barrios, Jayne & Jones, 2018; Hammig, Ogletree & Wycoff-Horn, 2011). Upon further examination of state data presented by the CDC, a discrepancy between topics covered and professional development arises. Although previous studies indicate that topics covered in professional development are more likely to then be covered in class, a large percentage of topics are covered in sex education classes yet lead health educators have not received professional development on those topics.

The CDC's School Health Profiles system collects survey data from principals and lead health education teachers across the United States on topics including but not limited to health education materials, health education requirements, professional development, and professional preparation. The School Health Profiles questionnaire covers a wide variety of health behaviors in relation to provision of services and instruction on topics such as tobacco use, nutrition, physical activity, health services and sexual health (Center for Disease Control and Prevention, 2017). The 2016 School Health Profiles released by the CDC reported data related to sex education topics taught in Mississippi schools. Among secondary schools in Mississippi, a range of 75% to 100% of schools tried to increase student knowledge on HIV prevention, human sexuality, pregnancy prevention and STD prevention in a required course. However, only 25% to 49% of secondary schools reported that the lead health educator had received professional development on these topics within the previous two years. Additionally, 25% to 49% of secondary schools reported that lead health educators in Mississippi had received professional development on topics such as connecting students to on site or

community based sexual health services, building student skills in HIV, other STDs, and pregnancy prevention, and on assessing student knowledge and skills in sexual health education. Although a lower percentage of health educators had received professional development, 75% to 100% of secondary schools in Mississippi reported teaching goal setting, decision making, communication, and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy in a required course during grades 9-12. Similarly, 75% to 100% of secondary schools also reported teaching the benefits of being sexually abstinent, health consequences of HIV, other STDs, and pregnancy, how HIV and STDs are transmitted, and how to access valid and reliable health information, products, or services related to HIV, other STDs, and pregnancy in a required course during grades 9-12 (Center for Disease Control and Prevention, 2016). It can be concluded from this data that a higher percentage of schools are reporting that lead health educators are presenting on topics relative to those receiving professional development. Data also suggests that teachers are not following state policy despite receiving the related professional development.

School Health Profiles indicated that 50% to 74% of secondary schools reported lead health educators received professional development on STD prevention, aligning lessons and materials with the district scope and sequence for sexual health education, creating a comfortable and safe learning environment for students receiving sexual health education, using a variety of effective instructional strategies to deliver sexual health education, and understanding current district or school board policies or curriculum guidance regarding sexual health education. As noted in the Mississippi sex education policy, condom instruction and demonstration is strictly prohibited for abstinence only



and abstinence plus curricula. Based on policy, any discussion of contraceptive use must be discussed in terms of risks and failure rates. Although over half of lead health educators in Mississippi secondary schools have received professional development on current policies, approximately 50% to 74% of secondary schools reported teaching, in a required course, how to correctly use a condom, how to obtain condoms, and the importance of using condoms consistently and correctly during grades 9-12. Furthermore, approximately 75% to 100% reported that, in a required course, they had taught efficacy of condoms (Center for Disease Control and Prevention, 2016).

The discrepancy between professional development and what is taught in the classroom can have dire consequences when teachers are not properly prepared to address various topics. Unprepared teachers are at risk for presenting inaccurate information to students. In other cases, teachers may be providing factual information that is unlawful to present to students. Decreased policy adherence leads to ineffective policy implementation and the intended effects to reduce early engagement in sexual behavior as well as related negative outcomes are consequently jeopardized. Preparing teachers through professional development based on national standards has the potential to equip them with the skills necessary to provide factual and lawful information that will improve the sexual health of adolescents.

Although previous studies have provided more insight into the teacher experience, content coverage, and barriers to professional development, there are limited studies on how professional development received relates to professional preparation and the implementation of sex education. Therefore, it cannot be concluded whether professional development and professional preparation are predictors for how sex education is

implemented including topics taught, student assessment, and increases in student knowledge. Sex education remains a component of Mississippi public schools, but evaluation of the policy is no longer required. In 2016, the sex education policy was extended for five more years as House Bill 494, and amended with the abolishment of the Teen Pregnancy Prevention Task Force (MS House Bill 494, 2016). In 2021, there were several bills introduced into Mississippi legislation regarding sex education that included changes such as prohibiting use of any school curriculum standards developed outside the state of Mississippi including the National Sexuality Education Standards, requiring collaboration between state departments of human services, health and education, and more extensive sex education and development of curricula that is “culturally proficient, evidence based, and medically accurate” (MS Senate Bill 2226, 2021; MS House Bill 891, 2021; MS House Bill 805, 2021). Each of these bills died in committee (SIECUS, 2021).

It is clear that Mississippi legislation on sex education is missing a key component that could create positive sex education reform, assessment and evaluation of professional development. These components are necessary for the improvement of education policy, health policy, and intended results. State and national data suggests that consistent and quality professional development has the potential to improve the content covered in sex education courses and health outcomes. Analyzing current data on professional development among Mississippi sex education teachers may provide the evidence necessary to not only understand the relationship between professional development, professional preparation, and implementation, but also strengthen sex

education policy and ameliorate the physical, social, psychological, and financial risks of early engagement in sexual behavior.

### Conceptual Framework

In an ideal situation it is expected that appropriate use of professional development in addition to adequate pre-service training would meet two objectives: 1) to meet set standards and policies and 2) to supply more prepared and confident teachers. Meeting these objectives has the potential to result in more prepared and confident teachers who are able to address sexual health and any controversial topics that arise, effectively implement sex education, and contribute to improved health outcomes of adolescents. Due to the sensitive nature of discussing sex or sex-related matters, controversial topics may emerge in the classroom as well as in policy. For example, Mississippi state law mandates that “There shall be no effort in either an abstinence-only or an abstinence-plus curriculum to teach that abortion can be used to prevent the birth of a baby” (Miss. Code Ann. § Code 37-13-171, 2016). Abortion by definition is the intentional termination of a pregnancy, however, teachers are not allowed to teach this factual information. Discussions about abortion may also conflict with teacher beliefs. However, effective professional development can educate teachers about the state policy and prepare teachers to guide discussions in a way that does not violate state law. A Mississippi sex educator who has received adequate professional preparation and professional development on state policy may be more prepared and confident to address the topic of abortion in a way that is legally and ethically sound. Therefore, improved sex education implementation and improved health outcomes may result.

Professional preparation and professional development have the potential to meet both of those objectives with the intended results of more prepared and confident teachers, addressing controversial topics effectively, improved implementation, and improved health outcomes. However, the Mississippi state law does not require professional development for sex educators specifically. Although teachers who have acquired Mississippi state licensure must obtain continuing education units (CEU), college coursework, or completion of the National Board of Professional Teaching Standards process, which contribute to professional preparation and development, sex education is not a target area (Mississippi Department of Education, 2012). Furthermore, according to the 2012 Mississippi Department of Education Contemporary Health curriculum and standards, licensure for health education teachers (grades 9-12) have limited professional development requirements. Although teacher preparation requirements include completing a contemporary health workshop approved by the Mississippi Department of Education, it is noted that if the requirements are not met, teachers may receive licensure within a reduced time frame and fulfill requirements before licensure expiration (Mississippi Department of Education, 2012). The Mississippi contemporary health curriculum provides details on student competency areas, but it does not address teacher competency areas. Those who teach sex education in Mississippi public schools, who do not receive appropriate professional preparation and development, are less likely to be prepared and confident to address controversial issues effectively. Therefore, it is also less likely that sex education implementation and health outcomes will be improved.

## Summary

Professional development has been shown in studies to be a necessary component to improving teaching skills in sex education. Standards and competencies may be met if adequately supplemented by consistent and routine professional development resulting in improved health outcomes for adolescents. In Mississippi, the inconsistencies of policy and professional development has led to a discrepancy between what teachers are trained to do and what is taught in the classroom. This study aims to determine the relationships among professional preparation, professional development, and implementation as well as explore sex education leaders' experiences and beliefs about professional development.

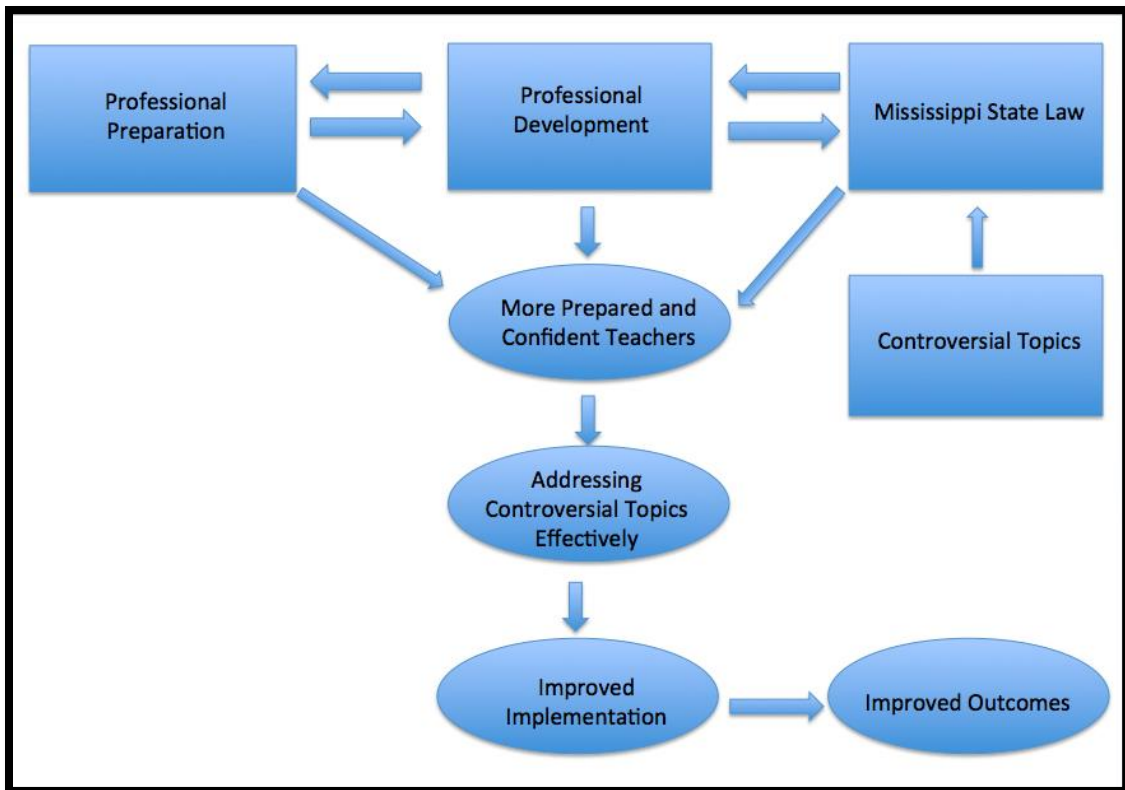


Figure 1. Conceptual framework with adequate professional preparation and development

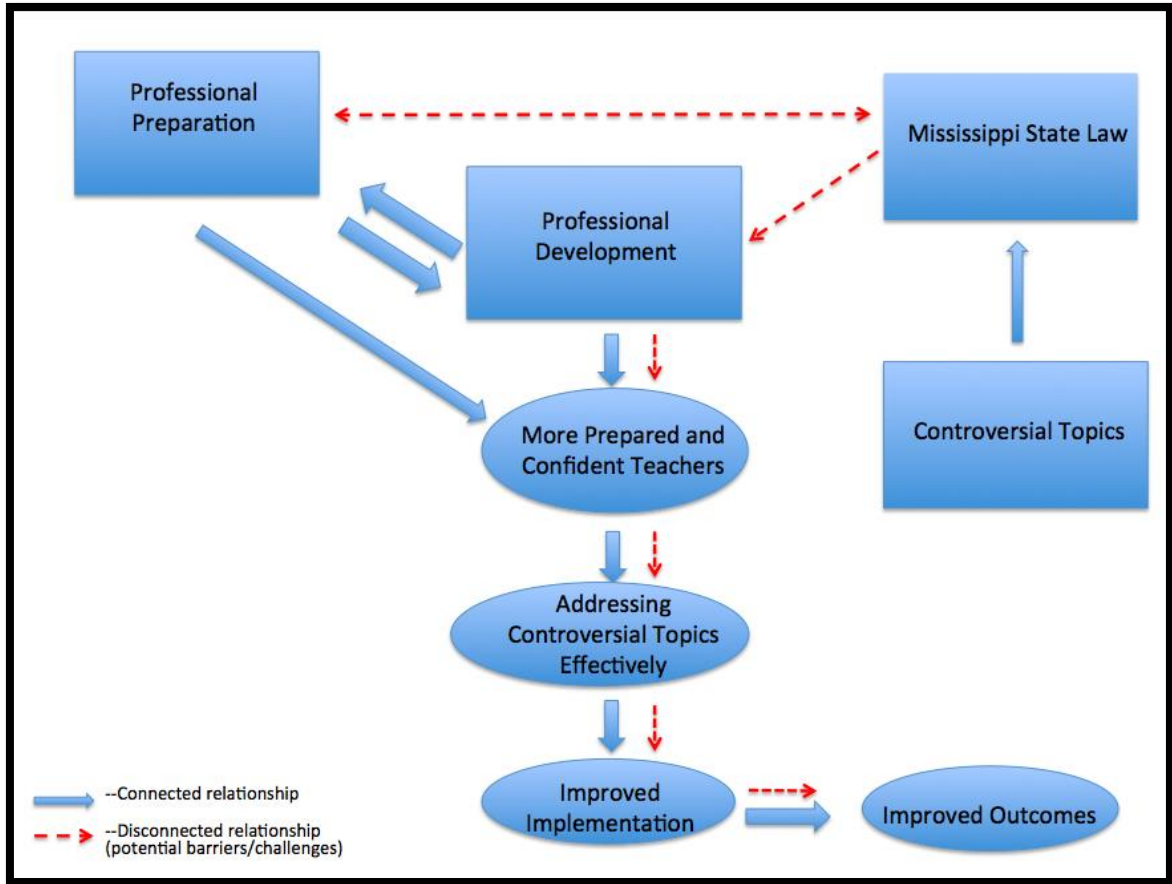


Figure 2. Conceptual framework with no adequate professional preparation and development

CHAPTER III - MANUSCRIPT 1: Exploring the relationships among professional preparation, professional learning, and sex education implementation in Mississippi using Structural Equation Modeling (SEM)

Abstract

In 2011, sex education became legally mandated in public schools across Mississippi in an effort to reduce rates of pregnancy and sexually transmitted diseases (STD) among adolescents. Ten years later, while teen birth and STD rates have declined, Mississippi continues to lead the nation in poor health outcomes among adolescents. Sex education in schools heavily relies on the teachers to provide quality implementation. However, the lack of professional development often serves as a barrier to sex education implementation. The purpose of this study was to examine the relationships among professional preparation, professional learning, and sex education implementation in Mississippi using the 2016 and 2018 School Health Profiles among lead health educators. Results showed that professional learning acts as moderator, strengthening the relationship between professional preparation and implementation. Therefore, professional preparation in the absence of professional learning opportunities such as professional development and further training negatively impacts sex education implementation.

Introduction

According to the Mississippi state law, teachers are not required to receive professional development on a regular basis or to be evaluated on sex education teaching proficiency (Miss. Code Ann. § Code 37-13-171, 2016). Although the state law mandates the content of sex education, the lack of regulation and support for training suggests that

teachers are primarily dependent on themselves for preparing to teach sex education and making decisions about methods or strategies that guide how sex education is taught. The result of insufficient knowledge, skills, and behaviors as well as an over-reliance on personal and cultural influences, could negatively influence both the teaching and learning environment. Studies on state policies have indicated that lack of professional development and teacher preparation may be barriers to improved implementation of sex education, thus affecting student outcomes (Kolbo, Werle, Ismail, Arrington, Harbaugh, & Esters, 2015; Arrington, Ismail, Werle, Esters, Frederick, Ellis, & Kolbo, 2018).

Despite the implementation of teen pregnancy prevention programs, mandated sex education in public schools, and lower rates of sexual activity among adolescents, Mississippi has consistently ranked high in detrimental effects of early engagement in sexual behaviors such as teen pregnancy and sexually transmitted diseases (STD), leading the nation in poor health outcomes (SIECUS, 2011; SIECUS, 2016; SIECUS, 2017). The Mississippi Youth Risk Behavior Survey (YRBS) reported that in 2015 over 40% of female high school students and over 50% of male high school students had ever engaged in sexual intercourse. This report also stated that over 80% of both female and male high school students had never been tested for human immunodeficiency virus (HIV) (Mississippi State Department of Health, 2015). In 2015, Mississippi ranked as one of the highest states in the nation for teen birth rate as well as for reported cases of chlamydia, gonorrhea, and syphilis among ages 15-19. Moreover, the rates of HIV and AIDS among adolescents ages 13-19 were more than three times the national average in 2015. Since 2015, there has also been a decrease in HIV testing (4.8%) and condom use (7.4%) as well as an increase in not using any method to prevent pregnancy (4%) (CDC,



2019). Although there is no data on sex education in the Youth Risk Behavior Survey for 2019, for 2015 there was significant positive correlation between being tested for HIV and having sex education in school ( $r=.08$ ,  $p<.001$ ) among Mississippi students. There was also a significant positive correlation between having had sex education in school and being taught about AIDS or HIV infection in school ( $r=.305$ ,  $p<.001$ ) as well as between having had sex education in school and being taught about birth control methods in school ( $r=.316$ ,  $p<.001$ ). These correlations suggest that for those who received sex education in school, they also had some level of education on birth control and HIV/AIDS. Furthermore, those who have had sex education were more likely to get tested for HIV (CDC, 2015).

In 2019, Mississippi continued to rank second in the nation for teen birth rate although the percentage of high school students who ever engaged in sexual intercourse continued to decrease since 2015, from 52.6% to 44.8% for males and from 44% to 38.2% for females (CDC, 2019). With the sex education bill renewed in 2021 and very little to no change from the original law mandating sex education 10 years ago, Mississippi may continue to see trends that do not reflect significant improvement if elements of sex education implementation are not closely examined including professional development and professional preparation of teachers.

#### *Conceptual Foundation: Professional Preparation and Professional Development*

Teachers face several barriers in sex education, which are often attributed to lack of training and professional development. Throughout the literature, research studies have made a distinction between professional preparation and professional development. Professional preparation involves formal pre-service training typically through higher

education resulting in a professionally recognized degree or certification (Hammig, Ogletree, & Wycoff-Horn, 2011; Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014; Eisenberg, Madsen, Oliphant, Sieving, & Resnick, 2010; Clayton, Brener, Barrios, Jayne, & Jones, 2018). In contrast, professional development provides an opportunity for sex education teachers to stay up-to-date on relevant information and strengthen skills through workshops, seminars, and other short-term trainings (Scott, 2013; LaChausse, Clark, & Chapple, 2014; Clayton, Brener, Barrios, Jayne, & Jones, 2018). Professional preparation and development not only increase knowledge and skills, but also confidence for teaching sex education and improved curriculum fidelity (Tietjen-Smith, Balkin, & Kimbrough, 2014; LaChausse, Clark, & Chapple, 2014; Clayton, Brener, Barrios, Jayne, & Jones, 2018).

Professional preparation and professional development have been shown to not only improve knowledge, skills, and behaviors of sex education instructors, but also improve implementation and positive health and academic outcomes for students. Thus, understanding the relationships among professional preparation, professional development, and implementation in Mississippi will determine what is needed to provide adequate training leading to meeting teacher needs and adherence to sex education policy. There has been very little research on the relationships among professional preparation, professional development, and sex education implementation in Mississippi.

### *Purpose*

The purpose of this study was to examine relationships among professional preparation, professional development, and sex education implementation based on

Mississippi lead health educators who participated in the 2016 and 2018 School Health Profiles. Using structural equation modeling (SEM), the relationships among professional preparation, professional development, and sex education implementation are statistically represented through a pictorial model, thus providing data on how teacher training impacts sexual health topics taught, student assessment, and increasing student knowledge. It was hypothesized that professional learning (including professional development and implementation preparation) acts as a moderator between the variables associated with professional preparation as a predictor and sex education implementation as the outcome.

### Method

The School Health Profiles system, developed by the Center for Disease Control and Prevention (CDC), collects survey data from a representative sample of schools across the nation using random sampling techniques. Lead health educators, defined by the CDC (2018) as “the person most knowledgeable about health education at the school”, is asked to complete a questionnaire with items that address multiple components of school health policies and practices including professional preparation, professional development, and implementation of sex education (CDC, 2018). Because the School Health Profiles strive to use information collected to inform policy, improve planning and programming, and assess professional development, the current study provides more specific information related to sex education that will supplement School Health Profile data and provide evidence that professional development greatly impacts sex education implementation in Mississippi.

### *Data Collection and Analysis*

With permission from the CDC and the Mississippi Department of Education (MDE), the researcher obtained School Health Profile data for Mississippi lead health educators for the 2016 and 2018 survey years. These years were chosen because they coincide with the last update for sex education law in Mississippi, prior to 2021. After data were cleaned, the researcher selected the following variables from the data set to include in the analysis: (1) implementation preparation including sexual health education and related materials provided by the school, (2) professional development received, (3) increase in student knowledge for grades 6-12, (4) sexual health topics covered for grades 6-12, (5) sexual health education student assessment for grades 6-12, (6) major emphasis area for professional preparation, (7) licensure/certification, and (8) number of years experience (*see Appendix B*). Variables 1 and 2 were indicators of the latent variable “professional learning” representing the training and preparation lead health educators reported. Variables 3-5 were indicators of the latent variable “implementation” representing the content covered and assessed in sex education. Since variables 1-5 contained multiple items, these were transformed into composite scores so that higher scores reflected more training and preparation to teach sex education as well as more content covered and assessed during implementation. Variables 6-8 were predictors in the model representing professional preparation. Variable 6 was recoded to focus on health/physical education and science/medicine based (nursing, science, kinesiology) emphasis areas to improve model identification.

Confirmatory factor analysis (CFA) was used to measure the indicators on the “professional learning” and “implementation” latent variables using IBM SPSS Amos to

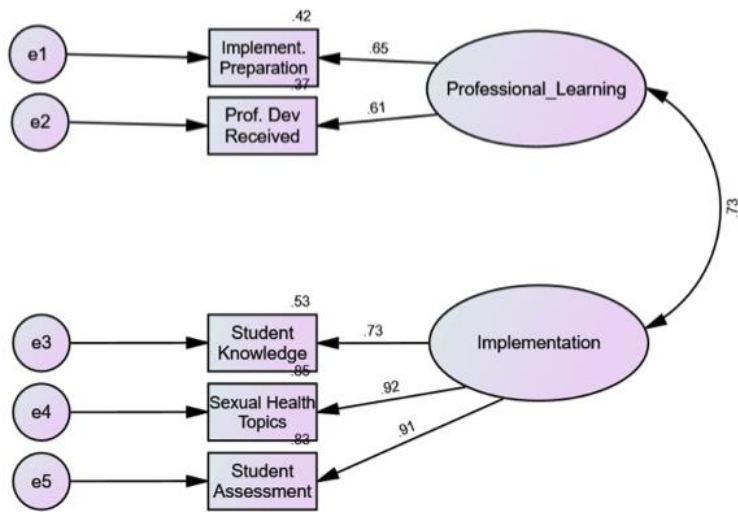
determine whether factors fit the measurement model (Meyers, Gamst, & Guarino, 2017). After the CFA was completed, the SEM was configured and analyzed including both observed and unobserved variables. Model fit was assessed using chi-square, root mean square error of approximation (RMSEA), comparative fit index (CFI), and Tucker-Lewis index (TLI) for both the CFA and the SEM.

## Results

The purpose of the CFA was to determine whether the model was a good fit as indicators of implementation preparation and professional development received represent the latent variable “professional learning” and indicators of student knowledge, sexual health topics, and student assessment represent the latent variable “implementation”. “Professional learning” and “implementation” were correlated and error terms were associated with each indicator. Results showed that standardized regression weights ranged from .61 to .92 providing evidence that the indicators strongly represent the latent variables (see figure 1). The chi-square test value was 21.195 (5,  $N=444$ ),  $p=.001$ . Although the model resulted in a significant chi-square test, fit indexes suggest the model is a good fit with CFI (.980), TLI (.941), and RMSEA (.086). Since the sample size is greater than 200, the chi-square test could identify small differences between the predicted and observed model, thus resulting in a significant value although fit indexes suggest good fit. Based on Meyers, Gamst, and Guarino (2017), when the chi-square test is significant and the sample size is large, the chi square value can be divided by the degrees of freedom to determine fit. In this study, the value of the chi-square test (21.195) divided by the degrees of freedom (5) is 4.239 indicating acceptable fit of the model.

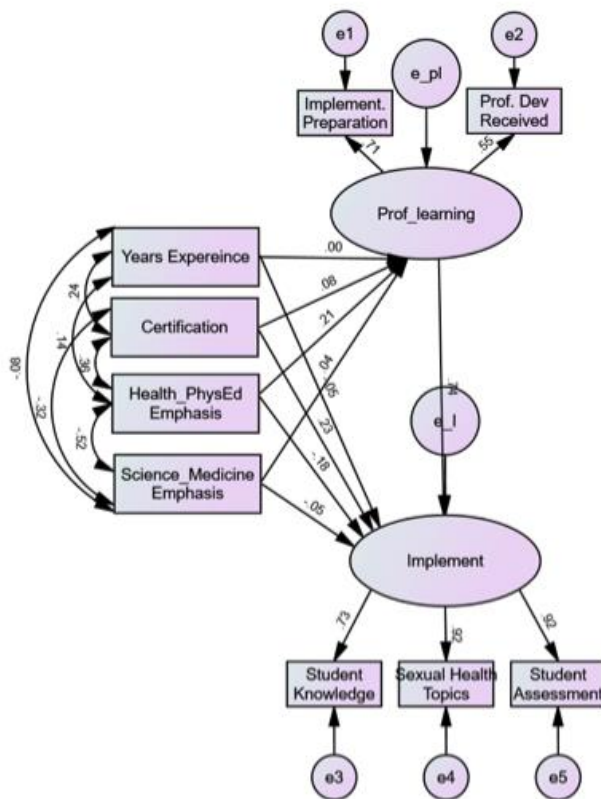
The SEM used four correlated observed variables of professional preparation that served as predictors of two latent variables, “professional learning” and “implementation”. It was hypothesized that “professional learning” was a moderator in the relationship between observed variables of professional preparation and latent variables. The chi-square test value was 48.227 (16, N=444),  $p < .001$  and resulting fit indices were CFI=.971, TLI=.918, and RMSEA=.067. When the chi square test value is divided by the degrees of freedom, the value was 3.014. These results suggest that model is a good fit to the data.

Path coefficients were significant from the predictor “certification” to the latent variable “implementation” (standardized coefficient=.232, unstandardized coefficient=.222),  $p < .001$ . However, all other path coefficients from predictors (emphasis areas and years experience) to “implementation” were not significant. Path coefficients were also not significant from predictors to “professional learning”. However, the path was significant from “professional learning” to “implementation” (standardized coefficient=.996, unstandardized coefficient=.740),  $p < .001$  (see figure 2). These results suggest that professional preparation does not have a direct relationship with implementation, but rather professional learning as a moderator strengthens the relationship between professional preparation and implementation. Thus, professional preparation and further training leads to increased student knowledge, student assessment, and sexual health topics covered during sex education implementation.



Figure

3. CFA



measurement model

Figure 4. SEM measurement model

### Discussion

Based on the results from this study, increasing opportunities for professional development and training has the potential to improve sex education implementation, particularly in Mississippi. There are three key points that can be gathered from this study. First, certification as a significant predictor for implementation suggests that standards consistently measured by a form of evaluation or assessment is necessary for the quality of sex education. Second, professional preparation including years of experience and emphasis area does not replace the necessity of professional development. Third, the model suggests that professional preparation alone does not have a significant relationship with sex education implementation. However, when professional preparation is supplemented with further training including preparation materials and professional development, sex education implementation is significantly impacted.

#### *Certification Predicts Implementation*

Certification and licensure is a process that requires teachers to provide evidence that they are competent to teach the designated content. When certification is supplemented by professional preparation and professional development two objectives may be met: (1) to meet set standards and policies and (2) to equip teachers with tools necessary to be competent, prepared, and confident (Wight & Buston, 2003; Ollis, 2010; Hammig, Ogletree & Wycoff-Horn, 2011; Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014; Rhodes, Kirchofer, Hammig, & Ogletree, 2013; Elfers, Carlton, Gibson, Puffer, Smith, & Todd, 2014). The questionnaire in the school health profiles does not



ask specifically what certification the teacher has received. However, those who acquire a Mississippi state licensure or certification must obtain continuing education units (CEU), college coursework, or complete the National Board of Professional Teaching Standards process, which contribute to professional preparation and development, but sex education is not a target area (Mississippi Department of Education, 2012). Furthermore, according to the 2012 Mississippi Department of Education Contemporary Health curriculum and standards, licensure for health education teachers (grades 9-12) has limited professional development requirements not specific to any health topic. Although teacher preparation requirements include completing a contemporary health workshop approved by the Mississippi Department of Education, it is noted that if the requirements are not met, teachers may nonetheless receive licensure within a reduced time frame and fulfill requirements before licensure expiration (Mississippi Department of Education, 2012). The Mississippi contemporary health curriculum provides details on student competency areas, but it does not address teacher competency areas. Those who teach sex education in Mississippi public schools, regardless of certification status or other professional preparation, who do not receive appropriate professional development, are less likely to be prepared and confident to effectively implement sex education.

### *Professional Preparation*

In the school health profile data, emphasis area and years of experience were considered as variables representing professional preparation. Data from this study suggest that these variables are not, however, significant predictors of sex education implementation. Even those emphasis areas considered to be health education and physical education-related did not have a significant relationship with sex education

implementation. Furthermore, there was no significant relationship between nursing, medicine, and science fields and sex education implementation. It cannot be assumed that those with a health/physical education, science, or medical background have had sufficient training in their professional preparation to teach sex education effectively. Therefore, it can be concluded that professional preparation in the absence of adequate professional development may negatively impact the quality of sex education since those individuals may not have been taught strategies and methods specific to sex education. Individuals who have not been specifically trained to teach sex education may create unsafe and uncomfortable learning environments for students. This is particularly the case if they have not grasped the influence of policy, dissected their own personal values and beliefs, understood how to address sensitive topics, and gained knowledge on content areas in sex education. In an effort to combat the negative consequences of insufficient training, professional standards for sex education have been developed to ensure quality implementation.

The establishment of the National Teacher Preparation Standards for Sexuality Education (NTPSSE) was intended to create consistent, quality sex education across the nation (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). In 2014, the NTPSSE was developed to strengthen higher education training programs for teachers by focusing on professional disposition, diversity and equity, content knowledge, legal and professional ethics, planning, implementation, and assessment (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). The standards and tools are designed “to provide guidance to programs within institutions of higher education in order to better prepare undergraduate pre-service students to deliver sexuality education” (FoSE, 2014, p.3).

However, these standards may be used as a guide for other professional training programs to ensure that competencies are met and individuals are qualified to teach sex education (FoSE, 2014; Fisher & Cummings, 2016). Continuous training and education is important to provide consistent methods and techniques for teaching sex education (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014; Elfers, Carlton, Gibson, Puffer, Smith & Todd, 2014; Fisher & Cummings, 2016). Yet development of program standards and competencies is critical to improving quality of teacher preparation, and an assessment of current teacher knowledge, skills, and behaviors may lead to better understanding of the needs of educators and ensure that standards are adequately met.

#### *Professional Development as Moderator*

Data from the current study clearly shows that professional development strengthens the relationship between professional preparation and sex education implementation, a conclusion also supported by the literature. The model suggests when professional learning includes both implementation preparation and professional development to further build teaching skills, there is improvement in student knowledge, sexual health topics covered, and student assessment. Implementation preparation means that sex education instructors are provided with materials such as goals, objectives, outcomes, written curricula, scope and sequence of instruction, age-appropriate strategies, and methods to assess student knowledge and skills. However, provision of tools for sex education classes does not mean teachers have the skills to conduct high quality implementation. Thus, professional development such as workshops, conferences, and other in-service trainings is necessary to allow sex education instructors the opportunity to demonstrate and practice *how* to implement sex education in the

classroom. However, previous studies have indicated that Mississippi sex educators lack access to professional development opportunities, thus impacting implementation.

In 2015, an evaluation conducted about sex-related education policies and practices in Mississippi showed that a majority of sex-related education instructors received eight hours or less of training per year and over 30% of respondents reported receiving no professional development or training. Furthermore, the evaluation found that approximately 60% of teachers were more likely to cover content areas in which they had received professional development such as consequences of not abstaining, benefits of abstinence, and how to handle unwanted sexual advances. In contrast, it was reported that more controversial and sensitive topics such as contraceptives, abortion, and the current state law related to sexual conduct, were less likely to be addressed through professional development and also less likely to be taught in class. Teachers stated that they needed more professional development and they identified barriers to professional development that included cost, lack of administrative support or approval, and availability of training (Kolbo, Werle, Ismail, Arrington, Harbaugh & Esters, 2015; Arrington, Ismail, Werle, Esters, Frederick, Ellis & Kolbo, 2018). Based on the model from the current study, lack of professional development negatively impacts how sex educators implement sex education leading to a reduction in student knowledge, student assessment, and sexual health topics taught. This is consistent with national studies that have also shown that professional development is key to sex education implementation (Clayton, Brener, Barrios, Jayne & Jones, 2018; Hammig, Ogletree & Wycoff-Horn, 2011). The recognition of this association has led to the development of standards to improve the

state of teacher training and sex education implementation by a group of national organizations called the Sex Education Collaborative (SEC).

In 2019, the SEC released the Professional Learning Standards for Sex Education (PLSSE) to guide professional development for sex education teachers. Using the National Teacher Preparation Standards for Sex Education (NTPSSE) as a guide to improve the quality of sex education, the PLSSE consists of four domains including (1) context for sex education, (2) professional disposition, (3) best practices for sex education, and (4) key content areas, which are also organized into topics and indicators. A few of the topics include values, disclosure, racial and reproductive justice, effective teaching strategies, responding to challenging questions, healthy relationships, consent, interpersonal and sexual violence, LGBTQ+ identities, puberty and adolescent development, contraception, pregnancy, reproduction, HIV, and other STDs and infections. The PLSSE may be used to plan, implement, and assess professional development opportunities across the nation, including Mississippi (SEC, 2018).

The current study provides evidence that professional development is necessary for the improvement of sex education implementation in Mississippi schools. This data is consistent with previous studies reinforcing the value of professional development in equipping lead health educators with the tools and skills necessary to change attitudes, behaviors, and practices resulting in improved student outcomes (Ollis, 2010). The use of standards to ensure quality and consistency of professional development has the potential to transform how sex education is implemented in the state of Mississippi.

#### Limitations

The secondary data analyzed includes a representative sample of Mississippi lead health educators of public middle and high schools. Therefore, the results may not be generalizable to lead health educators outside of Mississippi. Furthermore, since this study relies on previously collected self-reported data, responses may be affected by biases, such as response bias or social desirability bias. Additionally, some items in the questionnaire addressed whether teachers in the school had professional development and implementation skills related to sex education, whereas professional preparation items addressed the individual lead health educator taking the questionnaire. However, it cannot be determined from the data whether the lead health educator is the person responsible for sex education at the school. Therefore, results from this study are limited to the lead health educators. Sex education was only a part of the School Health Profiles, which also included other areas of health such as physical education, nutrition, and tobacco use.

#### Conclusion and Future Direction

Although previous studies have provided more insight into the teacher experience, content coverage, and barriers to professional development, the current study provides evidence that professional development and professional preparation in concert improves how sex education is implemented including topics taught, student assessment, and increases in student knowledge. Sex education remains a component of Mississippi public schools, but professional development and other training is not required for sex educators. In 2021, there were several bills introduced into Mississippi legislation regarding sex education that included changes such as prohibiting use of any school curriculum standards developed outside the state of Mississippi including the National

Sexuality Education Standards, requiring collaboration between state departments of human services, health and education, and more extensive sex education and development of curricula that is “culturally proficient, evidence based, and medically accurate” (MS Senate Bill 2226, 2021; MS House Bill 891, 2021; MS House Bill 805, 2021). Although none of these bills were passed in committee, Mississippi legislators did renew the sex education law without any change (SIECUS, 2021).

It is clear that Mississippi legislation on sex education is missing a key component that could create positive sex education reform, assessment, and evaluation of professional development. These components are necessary for the improvement of education policy, health policy, and intended results. State and national data suggests that consistent and quality professional development has the potential to improve the content covered in sex education courses and health outcomes. Current data on professional development among Mississippi sex education teachers provides the evidence necessary to not only understand the relationships among professional development, professional preparation, and implementation, but also strengthen sex education policy and ameliorate the physical, social, psychological, and financial risks of early engagement in sexual behavior. Future studies should further explore teachers’ confidence and preparation levels using the PLSSE tools as well as use a qualitative approach to gain teachers input on professional development in Mississippi. Furthermore, future studies should also assess the impact of students’ competency in sex education based on professional development that has been received by the teachers.

CHAPTER IV – MANUSCRIPT 2: “A home worth fighting for”–An autoethnographic reflection on sex education and professional development in Mississippi

Abstract

Mississippi consistently leads the nation in high rates of pregnancy and sexually transmitted diseases among adolescents. With an abstinence-focused sex education program mandated by state law, there is no regulation for professional development of teachers. Previous studies have shown that consistent professional development has several benefits including more prepared and confident teachers who can implement sex education curricula more effectively. As a native Mississippian, I draw on my unique experiences as a student, instructor, researcher, and leader to further understand the cultural factors that influence sex education in Mississippi as well as barriers to and outcomes of professional development. Using an autoethnographic approach, I collected personal memory data using writing prompts supplemented by field notes, textual artifacts, and external interviews. Results showed that the conservative culture of Mississippi has led to lack of prioritization, inconsistencies in implementation, and harmful approaches to sex education such as shaming. However, when professional development is implemented positive outcomes are evident for teachers, students, and the system as whole. Furthermore, being a native Mississippian provides an intimate understanding of the need, further driving motivation to fight for sex education and professional development efforts and working towards a vision for a better quality of life.



## Introduction

In a six-year time span, 2005 to 2011, Mississippi rose from ranking sixth highest in the nation for teen pregnancy rates to ranking second in the nation. There have been some improvements in adolescent sexual health especially since mandated abstinence-based sex education in public schools was implemented in 2011. Despite the implementation of teen pregnancy prevention programs, mandated sex education in public schools, and lower rates of sexual activity among adolescents, Mississippi has consistently ranked high in detrimental effects of early engagement in sexual behaviors such as teen pregnancy and STDs (SIECUS, 2011; SIECUS, 2016; SIECUS, 2017). In an effort to address these alarming statistics, Mississippi legislators renewed the house bill that mandates Mississippi public schools to adopt either an abstinence only or abstinence plus sex education curriculum (SIECUS, 2017). Although the state law is clear on expectations of sex education content, it is not clear on the expectations and requirements of those who teach sex education.

According to Mississippi state law, teachers are not required to receive professional development on a regular basis or to be evaluated on sex education teaching proficiency (Miss. Code Ann. § Code 37-13-171, 2016). Although the state law mandates the content of sex education, the lack of regulation and support for training suggests that teachers are primarily dependent on themselves for preparing to teach sex education and making decisions about methods or strategies that guide how sex education is taught. The result of insufficient knowledge, skills, and behaviors as well as an over-reliance on personal and cultural beliefs, could negatively impact both the teaching and learning environment. Previous studies on state policies have indicated that lack of professional

development and teacher preparation may be barriers to improved implementation of sex education. However, further exploration of the influence of culture and community identity, organizational policy, and personal experiences can provide insight into improving the quality of sex education.

### *Professional Development*

Although teachers face several barriers in sex education, these challenges are often attributed to lack of training and professional development. Generally, teachers are expected to participate in professional development programs to improve their teaching strategies and methods. However, these regulations rarely apply to sex education teachers in the United States, as professional standards and evaluation related to sex education are not priority (Barr, Goldfarb, Russell, Seabert, Wallen, & Wilson, 2014). Lack of professional development also leads to low curriculum fidelity, which impacts the effectiveness of evidence-based programming (LaChausse, Clark, & Chapple, 2014).

In a research study that used a qualitative approach to understand the experiences of pre-service training teachers in Minnesota, teachers acknowledged that sex education was an expectation of their jobs, but there were still times when teachers felt uncomfortable or embarrassed by the subject matter and that they lacked training to teach sex education (Eisenburg, Madsen, Oliphant, Sieving, & Resnick, 2010). Therefore, teachers desired more information and training to become adequately prepared to teach sex education. This not only included sex education content, but also culturally appropriate resources and information on how to address political and controversial topics in the classroom (Eisenburg, Madsen, Oliphant, Sieving, & Resnick, 2010).

Professional development provides an opportunity for sex education teachers to stay up to date on relevant information and strengthen skills through workshops, seminars, and other short-term trainings (Scott, 2013; LaChausse, Clark, & Chapple, 2014; Clayton, Brener, Barrios, Jayne, & Jones, 2018). Professional development not only increases knowledge and skills, but also confidence for teaching sex education (Tietjen-Smith, Balkin, & Kimbrough, 2014; Clayton, Brener, Barrios, Jayne, & Jones, 2018). However, in rural communities like Mississippi, barriers to professional development and lack of training often negatively impact sex education in schools.

#### *Culture and Community Identity*

Sex education differs based on geographic location and culture of the area. Community identities greatly impact decisions about sex education, particularly when comparing rural and urban experiences or expectations (Blinn-Pike, 2008; Jones, Jensen & Selzer King, 2014). According to DePalma and Francis (2014), cultural context has several implications in the classroom. In the United States, rural and urban communities differ based not only on culture, but also on several other factors such as demographics, crime and violence statistics, religious views, political views, and social climate (Blinn-Pike, 2008). These factors may lead to differences in how urban and rural communities address adolescent sexual health and sex education. When comparing urban and rural school settings, there are a few studies that identify the impact of the rural setting on sex education (Jones, Jensen, & Selzer King, 2014).

Blinn-Pike (2008) examined perceptions of sex educators teaching in rural southern communities in the United States. Results showed that although rural and urban administrators were said to be alike in the need for community acceptance, they are

different due to rural administrators having more direct community contact, religious influence, and fear of negative repercussions from the community in rural settings (Blinn-Pike, 2008). Consistent with these findings, in a study by Jones, Jensen and Selzer King (2014), participants reported rural communities had a more conservative, less progressive worldview than urban communities, which would restrict sex education. Furthermore, participants believed that rural communities have less access to information and this could also affect the teaching experience. The authors concluded that professional development and extensive training in both urban and rural settings could help sex educators understand how community identity affects educational opportunities (Jones, Jensen, & Selzer King, 2014). Community identity not only influences teaching strategies, but also creates barriers to parental approval, religious or cultural acceptance, school administration approval, and student safety (Eisenberg, Madsen, Oliphant, & Resnick, 2011; Eisenberg, Madsen, Oliphant, & Sieving, 2013).

#### *Organizational Policy and Controversial Topics*

Teachers encounter other specific barriers to sex education that not only result in a difficult time relaying information and messages about sex to students, but also are compounded by the challenging task of addressing controversial issues in the classroom (Walter & Hayes, 2007). Organizational policy and controversial issues can restrict what is taught in the classroom and may conflict with the educators' personal beliefs. Many school policies are established to uphold a distinct position against homosexuality, abortion, contraception, and pregnancy outside of wedlock and in some cases prevent teachers from addressing these topics in the classroom at all. This is especially the case for abstinence-only or abstinence-plus school settings that promote waiting until marriage

to have sex (Gill, 2015). Additionally, individuals who teach sex education may find themselves in the position in which personal beliefs do not coincide with organizational mandates. Furthermore, teachers are not trained on how to balance professional and personal values with organizational mandates (Williams & Jensen, 2016).

### *Personal Experience*

Personal experiences of the teacher should be taken into consideration as it impacts pedagogy (Kehily, 2002). Personal beliefs, attitudes, and past experiences of the educator can affect the teaching strategies and student experiences in sex education classrooms. Teachers who have not reflected on how their personal beliefs, attitudes, and past experiences shape their teaching strategies risk projecting their ideas onto students without fully exploring the context in which they teach (Kehily, 2002; Beyers, 2012; Beyers, 2013).

Reflecting on personal experience is particularly important when differentiating opinion from fact and fostering decision-making skills for the student as it relates to his or her own beliefs about sexuality and sexual health. When sex education is taught from the perspective of what the teacher believes is important as opposed to what the student actually needs, the gap between knowledge and practice widens. In order to narrow the knowledge/practice gap, Beyers (2012) claimed that teachers should make students' needs a priority and set aside their own views about sexuality and sexual health.

Given my experience as a sex education instructor and researcher, I chose to undertake a study of myself because I believe that I share a unique cultural experience with other sex education leaders who strive to make a difference in Mississippi youth. Leaders are defined as those individuals responsible for furthering K-12 classroom

instruction on sex related topics and reproductive health in the state through facilitation of professional development, implementation, and research. Often times, as a rural community, we are faced with different challenges and barriers because of our location and the deeply held southern values that define how sex education is delivered.

Furthermore, I have had the experience of not only serving as a sex education leader in my adulthood, but also share the lived experience of growing up in Mississippi during adolescence and being exposed to sex education as a student. Therefore, the purpose of this study is to explore my experiences as a native Mississippian to determine cultural factors that impact sex education and professional development as guided by the following research questions:

1. How have experiences as a native Mississippian sex education leader and cultural factors influenced sex education and professional development efforts?
2. What are barriers to professional development in sex education in Mississippi?
3. What are outcomes to professional development in sex education in Mississippi?

## Method

This autoethnographic method was chosen to explore my own identity as a native Mississippian and a sex education leader. Autoethnography is a research method that uses the researcher's personal data to reflect on the cultural perspective in the process of answering a research question through storytelling (Adams, Jones & Ellis, 2015). The art of storytelling allows the researcher to humanize and connect the data, explore and explain relationships, understand the sociocultural context, and bring about change.

Research is traditionally viewed from an objective lens in the quest to seek knowledge. During this process, it is typical for the researcher to remove themselves and their biases, as it may impact how the data is interpreted. However, in autoethnography, the researcher's personal experiences are deeply explored in an effort to connect experiences, memory, feelings, thoughts, and emotions to a broader cultural context. In an autoethnography, the researcher is able to dissect personal events through writing. As the self-narrative unfolds, the reader is brought inside the unique cultural views through the lived experience of the researcher, thus bringing further awareness and meaning to complex relationships, issues, and identities (Chang, 2008; Adams, Jones & Ellis, 2015).

According to Chang (2008), collecting personal memory data is a key feature of autoethnography. Reflecting on memories allows the researcher to critically reflect on various events and interpret with a sociocultural context. Although memory may be thought of as an unreliable source, the process of collecting memory data through writing exercises provides rich data through systematic exploration of thoughts, feelings, and emotions connected to recalled experiences. Furthermore, self-reflective data collection captured through the use of a field journal can provide deeper insights for interpretation.

While autoethnography is focused on self, it is important to note that culture is not defined or experienced by one person alone, but is dependent on one's relationships with others. Therefore, the data collection process can be strengthened with external data such as interviewing others and the use of textual artifacts like documents (Chang, 2008).

### *The Role of the Researcher*

As the primary research subject in this study, disclosing my positionality as both researcher and subject is imperative. As a native Mississippian and leader in sex education, I can recollect on my experiences in sex education attending both a public and private Catholic school. My professional journey in sex education includes interning at a Mississippi based teen pregnancy prevention program, which served as my training ground for becoming a sex education instructor. After graduating with my Master of Public Health degree (MPH) and becoming a Certified Health Education Specialist (CHES), I served as a coordinator of a community-based participatory research project that studied policies and practices affecting adolescent sexual health in Mississippi. I also continued to work as a sex educator in the schools where my primary responsibility was to teach sex education to 11-17 years olds over a five county area in Mississippi. Furthermore, I served on a team to evaluate sex-related education policies in Mississippi as the state law approached renewal in 2016. One of the key points that stood out in that evaluation was the lack of professional development among teachers responsible for implementing sex education. This study accounts for my experiences as a student, instructor, researcher, and leader while also drawing on the experiences of others who serve in similar roles as native Mississippian sex education leaders.



### *Data Collection and Analysis*

In this study, data collection consisted of four components: (1) writing prompts to collect personal memory data of my own experiences of sex education as a student, instructor, and researcher, (2) memos and journal entries throughout data collection and analysis, (3) textual artifacts including my daily log that captured activities, thoughts, feelings, and emotions as a former intern at a Mississippi teen pregnancy prevention center, (4) interviews of other sex education leaders who identified as native Mississippians, and (5) an interview of myself conducted by a colleague.

In “Autoethnography As Method” (Chang, 2008), the process of collecting data involves using timelines to chronologically identify important events related to the research topic, then organizing and prioritizing ideas, and selecting one item to write about in detail. For this study, I constructed three autobiographical timelines of my experiences of sex education as a student (elementary through high school), as an instructor at a local community health clinic, and as a researcher. For each timeline, I included the date and brief account of each item, and then chose one event to detail the importance and cultural significance in my life. To further supplement writing prompts, personal memory data, and external interviews, I included my daily internship log from the teen pregnancy prevention program as a textual artifact in the analysis.

To collect external data, five individuals, including myself, who identified as native Mississippians and sex education leaders based on their primary role were asked to participate in interviews. Interviewees were experienced in a variety of fields related to sex education in Mississippi including research, epidemiology, education policy, and program management. Using a semi-structured interview guide, I asked questions to

gather information about their experiences as sex education leaders, barriers and outcomes of professional development, and cultural factors based on being a native Mississippian that has impacted sex education. Using the same semi-structured interview guide, I captured my responses to those questions by having a colleague interview me. Before and after each interview, I collected self-reflective data by writing memos in a field journal about each person and the interview process. Each interview was audio recorded and transcribed for analysis. Once all data were collected, texts from all sources were organized into a spreadsheet and categorized along the following emerging themes: (1) need for sex education, (2) barriers to professional development, (3) motivation and fight, (4) outcomes of professional development, and (5) vision and change for sex education.

## The Revelations

### *Sex education as a student*

She was bubbly, vibrant, and always had a beautiful smile. The image engrained of her in my memory is seeing her prance in the gym in her white drill team outfit dazzled in burgundy and gold sequins with knee high boots. She was so good at dancing. As a new sixth grader, roaches they called us, it was nerve-racking leaving my elementary school and entering into the uncharted territory we call middle school. I didn't know anyone at my new school. It was in a new district so none of my elementary school friends were there. Everything was so daunting, a bigger building, a bigger class, different teachers, different schedules, and a whole new world. I didn't know it at the time, but I was about to learn a lot more than reading, writing, and arithmetic. One thing I knew for sure, the bubbly, vibrant, bright-smiled girl was always a friendly face I could count on.

Her name was Amber\*. She was in eighth grade, classified as an upscale lobster compared to my undignified roach status. I knew her and her family from a local church I attended frequently. She came from a large family and she had a younger brother around my age so we were quite familiar with one another. The moment I saw her prancing into the gym on the drill team at our first assembly, I was excited to see her. I had never seen her that way before because in the conservative southern Baptist church, everything was biblical, scriptural, and drowned in doctrine. Church was not a place to have fun and hang

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\* Name changed to protect identity.

with friends, let alone dance. It was the place to learn the catechism, sing hymns, and go to vacation bible school.

Seeing Amber high stepping into that gym, she was beaming. The drill team danced right into the section of bleachers next to us roaches. Although our eyes met and I knew she saw me, I was aware enough to know that as a lobster, her status may not allow her to speak to a roach like me and I understood. To my surprise, she smiled at me and said, “Hey, Joyee!” She didn’t know it, but that was the trust building moment I needed. We never did talk much in school since we were in different grades, but anytime we saw each other in the hallway or passed each other on the way to the cafeteria or if I happened to pass her on the eighth grade hallway headed to French class, she would always flash me a smile and I would wave. There were many days that I needed her smile and she didn’t even know it.

My sixth grade year was unsettling to say the least. The girls in my class did not look anything like the girls at my elementary school. These sixth grade girls were curvy, they were interacting with boys like I had never seen before, and they were talking a language I had never heard before, but in some ways I was prepared. Believe it or not, I knew what sex was all about, medically that is. My mom had taken the time to teach me all about sex at home since I was about 9. She brought me in her room one day and had all the encyclopedias out for R and S, reproduction and sexual reproduction. She explained to me about everything from periods, to the human anatomy, to what I might experience as I approached puberty. It was overwhelming at the time, but every year she would give me a refresher course. The summer before I went off to the sixth grade was no different, but this time around, her talks were more cautious. She would say things

like, “Be careful when you walk down the hallway. Never walk on the side with the boys bathroom because someone could try to pull you in”, or “don’t go in any dark rooms with anyone”, and “if anything ever happens, go to the office and call me, I’ll be there”. I didn’t totally understand, but I knew I needed to follow everything she said to keep myself safe. Safe from what, I didn’t quite know, but I was about to find out.

Gym was always my first period class. I would rush from homeroom as soon as the bell rang so I could be the first one in the locker room to quickly change into my P.E. gear before anyone could see me. A few weeks into the school year, one particular day, I entered the gym, but I wasn’t first as usual. There was someone else in the gym, a boy from my class. But he was standing up, facing the bleachers, and his pants were down. I immediately stopped at the door because I knew something was wrong, but I didn’t know what. Do I go back to homeroom? Do I find a teacher? Do I go to the office and call my mom? I stood there for about a minute wondering what to do as I started to hear other students coming down the hall. Just as I was thinking about it, Coach came out of the side door yelling “Boy, what you doing!?! Pull your pants up!” At this point, I wasn’t sure what was happening, but I knew I didn’t want to be the first one in gym class anymore. As Coach dragged that boy by the arm out of the gym, that moment made me feel like something sexual was lurking in every corner no matter which way I turned. That was just the beginning.

Sixth grade was also the year I learned about school parties and dances. Yes, the dreaded school dance. What I had seen on television was boys and girls standing on opposite sides of the room staring at each other while soft music was playing and maybe getting a cup of punch or a snack. I quickly learned that in reality that was not the case

and I was in for the shock of my life. When the roaches found out we were having our first school dance, most of us were excited. The school dance was scheduled for the last block of the day, which meant no English class. We were geared up all day waiting for the bell to ring and the announcement to be made that we could head to the gym. It finally happened, the bell rang and it was our turn. We couldn't contain ourselves, we were already giddy and dancing in the hallway. We got to the gym and the hardwood floor where we had done pushups that morning with Coach was full of students and they were not standing against the wall. They were twerking, gyrating, girls and boys dancing on each other, more so like I had seen in music videos. It was super uncomfortable. So instead of joining my fellow roaches on the dance floor, I chose to sit in the bleachers and watch everyone else drop it like it's hot while Project Pat's song "Chickenhead" was playing. That moment stunned me. How could the place where I was supposed to be learning and furthering my education be the same place where students can freely express sexual acts through dance while listening to sexually explicit music? I'm sure I went home and told my mom, but I'm not sure she could really envision what I was telling her until she saw it for herself.

It was the end of the Fall semester and our math teacher had taken a new job. We loved Ms. Hendricks\* and we didn't want her to go, but we wanted to celebrate her so we wanted to give her a going away party. She was young, in her mid 20's and quite vibrant, that's why she was our favorite teacher. My mom, being the parent that always volunteered, was ready to put all hands on deck to help with this event. Since I'm a lot like my mom, I was on the "planning committee". I knew everything about parties and food was important. In a conversation with a couple of my fellow classmates, we were

discussing the menu. There were some ideas about hotdogs and chips, which I thought was an appropriate menu for our event. So I decided to chime in and say “We also need condiments!” To which both girls looked at me stunned and one said, “what do you know about condoms?!” I was extremely confused and said “what are condoms? I said condiments, like mustard and ketchup”. They replied “oh, we thought you said condoms”. I wondered about what condoms were for a while, but that wasn’t as important as the party for Ms. Hendricks so I let it go. The day of the party arrived and we were all excited. I knew my mom would be there early in the day to help set up, but I couldn’t figure out how to explain to her what she was about to experience.

When I walked into the party room, my mom was there as expected, putting on all the finishing touches. Then the music started up and I knew some trouble was about to go down. The girls started dancing and before I knew it the same things I had seen at the first dance, were happening right in front of my mom. The boys were grinding on the girls, girls were dancing on top of the tables, and one of the boys had poured ice down Ms. Hendrick’s shirt. I don’t know if I was horrified or relieved that my mom could finally see what I had been experiencing. It really didn’t matter because she was shocked too and turned that whole party upside down. She started pulling the girls off the tables and yelling at the boys. Then she started yelling at the teachers, “Why aren’t you all doing anything about this?!” The teachers’ response was “This is just what they do, nothing we can do about it”. Needless to say my mom was not happy. That sixth grade year, I saw girls get in trouble for being in the janitor’s closet with other students, I listened to my peers talk about sexual acts and tell sexual jokes, I probably learned more

about sex that year, than I had ever known even with all my mom's at home sex education.

When I first arrived at my middle school, there was perhaps one camera to capture any suspicious activity on school grounds. By the end of the school year, there was a camera in every corner. Students were getting away with so much, sneaking off into corners and dark rooms to engage in sexual acts that I suppose that was the school's solution, to catch them in the act rather than preventing the act. Sixth grade was my last year in public school before my parents took me out and put me in Catholic school for seventh grade through twelfth grade.

At my Catholic school, sex education took on a whole new meaning. It was the complete opposite of what I had experienced the year prior. Everything was structured, there were no parties during school hours. Even at school dances on the weekends, I heard that you had to leave enough space for the Holy Spirit between the two of you. The only sex education I remember was in seventh grade, Ms. Mitchell's religion class, we had to write every scripture in the bible that was related to sex as a sin and fornication. At an eighth grade mother/daughter seminar, they focused on abstinence and a lecture from Sister Mary\* where she basically said don't have sex. And then senior year, we had a simulated baby project where we were assigned an electronic baby to care for over the weekend. While we planned our wedding before we took care of our babies, there was still no discussion around how to prevent this from happening other than waiting until marriage to have sex. Although there was a stark contrast between my experiences at my public middle school and private Catholic school, one thing was the same. Sex education was practically non-existent, there were no real preventative efforts and no one really



talked to us about sex. In both settings there were students who got pregnant or suspended from school for various sexual acts. The private school kids were having sex just like the public school kids, but if they got pregnant they quietly went away and never returned to school. By the time I was a senior in high school, I knew of one teenager in particular who had children, Amber.

After I left my sixth grade year, Amber was off to high school where she eventually became pregnant and had 2 children before she was 21. I saw her around church occasionally, but after she got pregnant things changed. From what I remember, the church wasn't very supportive and fell more so on the side of shaming. I don't know if it was a rumor or not, but I had heard that they wanted her to go before the deacon board and apologize for getting pregnant and committing a sinful act. She wasn't as bubbly and vibrant after that and I didn't see her at church as often. She occasionally brought her children around for vacation bible school and helped with the children's classes. There was just something different about her, but she still flashed a beautiful smile. I never talked to her about getting pregnant, but I always wondered what it was really like for her.

In May 2007, I had survived 6 years of private Catholic school and I was off to college. I found myself always faced with decisions about sex as I went off into a more independent life. There was some shame I thought I might feel because of my faith, but what really kept me was the extensive sex education I received from my mom. I was informed enough to make those decisions for myself, later in life I would be grateful for that. I couldn't say the same for Amber. One day in my early college years, I was notified that Amber had passed away. I was shocked, I didn't know what to think or what to do. I

remember it being a shock to the church as well. I remember my brother and father telling my mom, and my mom screaming in horror, overcome with emotion. About a week later, I went to Amber's funeral. It was the biggest funeral I had ever attended. So many young people, and many of them were my sixth grade classmates who had also been touched by Amber in her young life. We looked different, we were older, but that day we shared something in common, our love for Amber and her family. I started thinking how young she was, her parents and siblings who loved her dearly, and her two young children who will never know her bubbly and vibrant personality. I couldn't bring myself to go up to the casket to see her one final time. I wanted to keep my memory of her as sacred as possible, dancing, beaming, and smiling. I sat on a pew in the back and watched so many familiar faces filled with tears. I watched so many church folk who had passed judgment just a few years earlier, now comforting others in the spirit filled sanctuary. I wonder often, what could have been done differently? How do we treat our youth especially in spaces like the church that is so essential to the culture of Mississippi? How do we set up our schools to address sensitive topics like sex education effectively?

In my years of being a public health educator, working with teen pregnancy prevention and sex education, I think about Amber often. Every young person I encounter, I don't want them to leave a space feeling shamed. I want them to be educated and informed. I want them to trust the adults in their lives with their questions, feelings, and emotions. I want them to know the information that could make a difference in their life. However, I also know it's not all up to the youth. The adults have more work to do on themselves than anyone else. Amber was a light taken too soon, but I carry her with me.

I don't know what Amber's path could have been, but as the adult now, I know there are so many more young paths we can influence before it's too late.

### *Sex Education As Instructor*

During my Master of Public Health Program, I was required to complete an internship and I heard about the local teen pregnancy prevention (TPP) center. I didn't really know much about sex education, but after learning more about the program from my internship coordinator and interviewing with the director of the TPP program, I thought that the work was really interesting and definitely needed. I was offered the internship position, but I wasn't quite sure what I was stepping into. On my first day, I walked into the office with a ball of nerves and met all the staff members. It was a pretty diverse group and everyone seemed friendly. Over the course of 4 months, I learned more about the program as I sat in classes and watched the students interact with the staff. I saw how sex education was being brought to life to inform students about decision-making and relationship building. Although the program was an abstinence only curriculum, I thought that the staff did a good job of incorporating various activities and knowledge to make sure these students were not only engaged, but also felt safe and comfortable. I could only wonder, what if we had something like this when I was in middle school. How different would things have been if I could have asked questions about sex? How different would my peers have responded to a sex education curriculum? As my internship approached the end, I had a new appreciation for sex education and I knew I wanted to continue working with TPP.

It was then that I saw a job opening for a community outreach coordinator position at TPP. I was excited because I knew I was capable and had already built a relationship with the team. I decided to go for it. I applied, interviewed, and waited patiently for a response because I thought my chances were greater than most applicants. Then, in the last couple of weeks of my internship, the director of TPP called me into her office. From her tone, I knew it was about my job opportunity. I nervously went into her office, but when she closed the door, I knew this was not going to go the way I thought. She said “I’m really sorry Joyee, but you were not selected for the position. Your application and interview were great, it’s just that some other applicants had more experience”. I tried to hold back my tears while I graciously thanked her and let her know how much I had enjoyed working with them. I walked away heartbroken that I wouldn’t be able to serve at TPP. Little did I know, there was another opportunity waiting for me.

About a month after graduating, I received a phone call from a former professor. My professor expressed they were on a research team and needed a coordinator, so they wanted to interview me. I was stoked. Interestingly enough, this community-based participatory research project was about adolescent sexual health and the community partner was the same clinic that organized TPP. The research team was so impressed that I was hired and started working immediately. Nine months later, the research program was going well, but unfortunately the TPP grant was not renewed. The staff members went their separate ways, however, the community and local schools rallied that they still wanted sex education for their children. Only one staff member from TPP retained employment at the clinic, and they were in need of another health educator. This was my shot, my chance to serve as a health educator and actually teach what I had been so

inspired to do months before. When the job started, being on the other side was much different than I anticipated.

For the most part, I remembered the general structure of the curriculum used for sex education by TPP. Since I had mostly been an observer as an intern, I had not been formally trained as a sex education instructor. The staff member I had developed the closest relationship with as an intern, was the only one who continued to work with the clinic after TPP ended. She was always very open, honest, and encouraging. She let me know that the training was extensive and I would have to practice to really get the hang of it. There was so much I had not really thought about it, the classroom management, how was I going to answer sensitive questions, what if a topic comes up that I'm unfamiliar with or makes me uncomfortable. Being in the position of the educator was totally different than the intern role. But after weeks of training, practicing the lectures and activities, understanding program fidelity, working through pre-tests and post-tests, and gathering all my materials, the day had finally come to start implementing the sex education program at the local middle and high schools, but I didn't know if I was ready.

The first few weeks of implementation were shaky. I didn't want the kids to sense my fear, so I put on a strong front and did everything I was trained to do and eventually it got easier. The weeks flew by and after a while I had built relationships with the kids, they were excited to come to class and I could really tell they were understanding the information. They were asking me questions and telling me stories that I never thought I would ever hear. For instance, one little boy told the whole class, "My mama said if I have sex, my pencil will fall off!". The whole class broke out into laughter, after settling

everyone down I explained that number one it's not called a pencil, it's a penis. And number two it won't fall off, but there are some things we need to discuss about what happens if you do have sex. Some kids were interested in the discussions and some I could tell the information was in one ear and out the other. But as an instructor, I did my best to keep them engaged. I hoped that for at least one of these kids, knowing the information would help them make a better decision for their future. But classes weren't always this easy going.

There was one day we were implementing at a school and the counselor came in and wanted to talk with me and the other educator. The middle school had a campus clinic and a young lady had just found out she was pregnant. They wanted us to come and talk to her. I had been trained on the curriculum, but I hadn't been trained on what to say to a student if they were pregnant or had gotten someone pregnant. The curriculum was abstinence only, it didn't even address if students were currently sexually active. I had no idea what to say, thankfully the other educator handled the situation with grace. The young lady seemed to be numb with what was going on, she didn't cry or show any emotion, she was just kind of there. She wasn't a part of our sex ed classes, but I wondered if she had ever had sex education. I wondered what was going to happen to her now. We left that counselor's office and I wasn't sure what to feel, heartbroken, defeated, I mean what do we do now?

Another time we were preparing to train other coaches to teach the curriculum at their school. As we were setting up the bell rang and all the students were going to homeroom. But as I looked out the window, I saw 3 students, two girls and a boy, still outside after the second bell rang. They talked for a minute, then they started playing

around, hitting each other, doing what teenagers do I guess. It just looked like they were late for class chatting. I continued setting up, but looked out the window every few seconds to see if they were going to class. They weren't. But things started to shift, the touching became caressing and hugging. One girl went to the corner of the building, as a lookout I suppose. The other girl began getting a lot more personal with the boy. In a matter of seconds, I saw the boy on the ground and the girl about to get on top of him and I knew these kids were not just cutting class to talk, they were cutting class to have sex. I started having flashbacks of sixth grade. The other educator and I took off running outside, screaming at them to get off of each other. To which the students started yelling back at us and saying things like "You not my mama"! It may not have been the best reaction or response at the time, but the only thing going through my mind was I've got to stop this. We didn't stop to educate them, or calmly talk to them, or figure out what was going on. It was all adrenaline and reaction. Eventually, the coaches took the students to the office or class, I'm not sure which one and I had to file a report about what occurred. I didn't want it to end that way, I didn't want to be another adult screaming at someone's kids. That was an opportunity to build understanding and trust, honestly I felt like I blew it. It was at that moment that I knew what we had as far as sex education was not enough. But I didn't see the kids as the problem, as the instructor, I was the problem.

These kids are going to find a way to have sex, but we as adults have a lot more responsibility to be there for them whether they do or don't engage in sexual behavior. I could have handled the situation in a different way, but I didn't know how. There were other instances where I felt totally unprepared to address certain topics and circumstances. Like when a student asked me about abortion, but the state law prevents

me from addressing it. When I look down the hall and see two girls holding hands and are obviously romantically involved, but the state law says I can't address same sex relationships. When I see a middle school girl is pregnant and witness teenagers on the verge of engaging in sexual activity, but the state law says I must teach abstinence only. It makes me wonder; exactly whom is this sex education law built for? Is it really for the students, to keep them safe, to keep them informed? Or is this law structured to make the lawmakers feel better about themselves and protect their own views? This is not all on the kids, when are adults going to take responsibility and realize when they have blown it. After 10 years of sex education being mandated in Mississippi, when are we going to re-evaluate the situation? Does sex education work? Sure, the numbers are down, I can agree to that. Is it as effective as it could be? Absolutely not. How could it be better? From my perspective as a sex education instructor in Mississippi, the adults have some real work to do. It's about time we took a closer look in the mirror and decide if we are really a part of the problem or the solution.



### *Sex Education as Researcher*

After my internship at TPP, I had never really thought about research in sex education. I had just graduated with my MPH and a former professor contacted me about a research project and they were looking for a coordinator. This was a community-based participatory research (CBPR) project for which they were seeking the local community's input on policies and practices affecting adolescent sexual health. This piqued my interest because I had learned about this concept and research strategy in my public health program. I was just excited to be considered for a job, the fact that it was a research job and related to sex education was the icing on the cake. During my interview with the principal investigators, they were so impressed with my background in research and my internship at TPP, that I was hired immediately.

Some of my responsibilities included working with the outreach coordinator of TPP to build a community advisory board, recruit community participants, facilitate focus groups, collect and analyze data, and disseminate data to community members. I realized this was going to be a big task, but I was up for the challenge. After interning at TPP, and seeing the importance of building community relationships, I was excited to be a part of this effort. Over the next several months, we were able to bring approximately 100 community members together to discuss their views on adolescent sexual health. This was particularly important because the TPP program was going to close and the community wanted to figure out what needed to be done next. The more we engaged the

community, the more dedicated they were to the cause. That opportunity led to a greater understanding of how I could best use my research skills in my PhD program.

Because of my experiences with sex education, I realized that I wanted sex education to be a focal point of my dissertation research. After much thought and digging into literature, I thought a great focus would be taking a closer look at teacher's professional development and sex education in Mississippi. Since I was also on the team for evaluating sex education policies and practices in Mississippi, I knew we had data that suggested sex education instructors were not only lacking professional development, but also wanted more professional development. I realized that there was also a national initiative to support professional development for sex education teachers through the Sex Education Collaborative (SEC). I thought it would be worthy research to delve deeper into teachers' thoughts about professional development in sex education by modifying the professional learning assessment created by the SEC and conducting interviews with sex education teachers about their experiences with professional development in Mississippi. After gaining approval from the SEC, and my dissertation committee chair, I was well on my way. I had even started attempting to contact individuals at the Mississippi Department of Education (MDE) to gain their support. I didn't have much success with that, but I figured it was a busy time of year and I would try again closer to my proposal.

By early 2020, I had written my dissertation proposal, modified the assessment, I was ready to present my research ideas to my committee, and I felt confident in the goals of my research. I thought surely this research could make a difference in how we

approach sex education if we focused more on providing training opportunities for our teachers and had the data to support it. The day had finally arrived, March 3, 2020, I was dressed professionally, I had my powerpoint presentation ready, and I knew all the details of the literature. Once I heard those final words approving my proposal, I left the room feeling so hopeful, like there was light at the end of the tunnel. Little did I know, I was celebrating a little too early and the light would disappear in a flash.

The next step was to begin preparing my IRB and I knew I was going to need permission from MDE before I could even get started. I guessed that I would run into some challenges trying to contact someone at MDE, but I couldn't imagine they wouldn't want to support an effort that could help their teachers. For the next week or so after my proposal, I worked on drafting my emails and seeking contacts. I thought since my Spring Break was coming up in mid-March that would be the best time to start making all my contacts and I had even planned to visit offices in person. I felt confident that if I could get face to face with someone to let them know about my research and how my data could help the state, I could get them on board. In the week between my successful proposal and my anticipated Spring Break, everything fell apart.

On March 9, 2020 we received notice from the university about the COVID-19 pandemic. The entire week was email after email about not traveling for Spring Break, then Spring Break was extended, and eventually, we weren't returning for the rest of the semester. As I watched the pandemic unfold, I knew I needed to get a head start on contacting people, but I was too late. People were not responding to emails about my sex education research and understandably so. MDE had shut down, schools were closing, the nation was on lockdown, and I could hardly reach anyone on my list of contacts. I

was stuck, stalled, I had no choice but to sit there and wait for a window of opportunity. About 1 month into the pandemic there was no end in sight, so I thought I needed another plan. After speaking with my advisor, I thought social media might be another helpful outlet especially since more people had shifted online. I made a list of about 20 organizations and social media groups. The plan was to provide information about my research and they could send the information to organization members through their social media pages. This was it, this plan had to work. By July 2020, I had gotten approval on my IRB application and I was ready to start contacting organizations through Facebook. I was feeling better again. It had been a few months since the start of the pandemic and certainly people would respond now. I had better luck this time, a few organizations were interested in my research and posted my survey details on their social media pages, but it wasn't enough. The one organization I was counting on, which had almost 10,000 members, kept deleting my post with the survey details. After contacting the administrators of the group, they said they would help push it out for me, but they never did. This was another devastating blow. I was starting to think my research was not worth all this trouble, but I decided to keep pushing and devise another plan.

By September 2020, my new plan was to contact groups such as education consortiums and professional educator organizations to send the survey details to their email lists/ listservs. I knew this way, the survey link could get directly to my target population. I revisited some of the organizations from my previous lists and I added a few new ones. Some organizations responded, but most did not. By November 2020, I had some good leads but nothing was coming through as far as participants for my survey. The holidays were quickly approaching and it was recommended to me by my advisor to

take a break and we would try again in January. I couldn't imagine going through this devastation again. One morning, I literally woke up in tears. I felt like I was in the middle of the ocean and no one could hear me scream. I was trying so hard to do this research that I thought was important. Not just for me to graduate, but important because I believed it could help people, my people. It seemed like nothing I was doing was important and everything I did seemed to crash and burn. I started to feel like nothing was going to work out. I started thinking should I change my topic, should I even be doing this research, perhaps sex education just isn't that important right now? Somehow I knew deep down that I was on the right path, but I just needed another pivot. However, I was too deep in my own research fog to see anything clearly.

One weekend, I went to my parent's home and on Sunday my mom was listening to a pastor on television while she prepared Sunday dinner. I happened to be walking through the kitchen while the pastor was preaching and something caught my ear. He was telling a story about a man interested in a business venture. He went to a corporate meeting and after hearing the details he said he was going to consult God about it. The other corporate executive in the room said "Can we please leave God out of this"? To which the man replied, "I don't want to be a part of any business that God isn't a part of". That got me thinking, I had not spent much time consulting God about my research, my dissertation, or this path of sex education. From that point on I started praying about it, bringing God into His work. I felt led to pivot towards secondary data. I started looking up information from the CDC on sex education in Mississippi and I realized everything I needed was right in front of me. I requested the data from the CDC and was told I needed to get permission from MDE before it could be released. My heart dropped. I was sure

this would be no easy task. But to my surprise, a contact from MDE responded immediately to my request and in a matter of days I had the data I needed.

As January 2021 approached, I still decided to follow my advisor's recommendation and give my primary data one more good try. I had more success reaching organizations and making contacts to get my survey distributed than any of my past efforts. I even was able to reach national organizations with Mississippi chapters to distribute my survey. I thought this was such good news that my primary data just might come through. There was one piece of the puzzle I momentarily forgot. Just because organizations agree to distribute my survey doesn't mean that participants will agree to complete my survey. But the good thing was I got plenty of leads and was able to do some great professional networking. After attempting to collect primary data for over a year, I finally called it quits. I closed my survey link and didn't even bother looking at the 5 responses I had collected. It was time to officially move to analyzing secondary data and interviewing sex education leaders instead of teachers. Most people might say my research plans failed. Perhaps I did run into a few failures, but it also led to some invaluable lessons.

One lesson was more of a critical reminder, it's something I tell my research students all the time. Although my research is a priority for me, it may not be a priority for anyone else. The COVID-19 pandemic threw a wrench everyone's plans, not just me. Collecting data for research purposes has been difficult for many in this season and sex education in Mississippi was no different. In general, sex education has a reputation for being viewed much lower on the priority list in Mississippi. However, the pandemic nearly pushed sex education off the priority list altogether. But how do we determine

what's a priority and what is not? And what do we do when our effort is not important enough to be deemed worthy? As a researcher, I've learned that in those moments, I have to choose whether I will continue the path or keep pushing towards the mark even when I feel very little support. The next lesson I learned was that being a researcher has its challenges and many times the plans will change, I had to learn how to be flexible and let go of what I wanted to happen and lean in to where the research was leading. If I had to do it all over again, there are some areas for improvement in the future.

Although I don't believe I could have done anything differently to make my original plans more successful given the chaos of the pandemic, I do think there are some things that could be done differently to ensure sex education research results in evidence to help Mississippi youth thrive. First, there should be a community approach. When conducting research that will impact the community, it is more than collecting and analyzing data, it's about building relationships. Community members and stakeholders often set the tone for what is considered priority. We need to make sure our research strategies focus on community engagement, capacity, and building. Second, collaboration among organizations that support sex education is imperative. By bringing various organizations to the table, we can gain different perspectives on how to best approach challenges and bring resources together. Third, we must understand that the ultimate goal of research is to collect evidence that will support change. It may be a good and noble effort to collect and analyze data, but we need to ensure that data will be used for creating positive change for our communities. Therefore, we need systems in place to take this data from research to action. We need those who know the culture, the people, and the history of Mississippi to lead the charge. We need to create a platform for those who are

on the front lines of sex education every single day to have their voices heard as we explore ourselves and what we stand for in the process.

Exploring who I am as a researcher was one of the greatest gifts I could have ever experienced. I did the research, I went through the process and did everything I could to collect the data. I might not have the expected results to show for it, but I'm a better and stronger researcher because of it. This experience pushed my limits as a researcher, it took me out of my comfort zone and through the fire. It reminded me about why I was so fascinated about research in the first place. It's the discovery, it's arriving at a place of knowledge that I never knew before, even if that is understanding some things about myself. I'm a better researcher because with every seemingly failed attempt, I found a new strategy and implemented a new process. I'm a stronger researcher because I was resilient and eventually ended up exactly where I needed to be while sharpening my skills along the way. The journey was frustrating, exhausting, tiresome, and many days I wanted to give up, but something else was motivating me. As I began to understand how my views as a researcher are influenced by my culture, it became clear that my drive was fighting for Mississippi.

I was born and raised in Mississippi, lived here my whole life. The Mississippi I know and love is southern comfort at its best, it lives so deep in my soul that it's forever a part of my identity. It's church all day on Sunday, hot cornbread and collard greens, saying hello to the stranger walking down the street, hearing the birds sing in Magnolia trees, and sitting on the porch sipping a cool drink while the cars roll by and laughing with your family. It is home, but home has its challenges. I came to grips with this realization and I learned that as a researcher in sex education, particularly as a native



Mississippian, I was fighting for more than myself. I kept asking myself, why I am pushing so hard for sex education, what is keeping me motivated to stay on this path when it is clear the support is limited. I know what it is like for youth growing up here. I know how far sex education has come and how far we have fallen short. I've seen youth like me impacted by their decisions or the decisions of others. I know their path could have turned out differently. I know that as an adult I have a greater responsibility now. I am fighting for a legacy, a better Mississippi, a higher quality of life for future generations, a transformative experience, and a place I call home.

### *Sex Education as Leader*

After so much frustration with my dissertation, I decided to shift my focus to those in leadership positions such as administration, management, and research in sex education, who were also native Mississippians like myself. I thought this might be an interesting perspective to consider how our experiences as native Mississippians have shaped our work in sex education. How attached are we to this topic because we are native Mississippians? What is the vision that we want to see for our state as it relates to sex education? Why do we fight so hard to make sex education better in the place that we call home only to be faced with so many challenges? I had a few people in mind to interview, but honestly I was disheartened by my previous efforts so I set my expectations low because I didn't want to be let down again. At this point, I knew my research was valuable, but I wasn't so certain if others could see it.

My first interview was with Angela\*, an epidemiologist with experience in reproductive health research. In our initial meeting, I explained the challenges I faced in conducting my dissertation, she stated that my research was much needed as she could relate based on working with teachers who felt unprepared to teach sex education. Her statement reassured me that my research was indeed valuable. As we continued to talk in her interview, one phrase she said stood out to me. She said there are just so many “*competing priorities*” and teachers have other stressors like focusing on state tests. She said they probably want to participate in a survey or be involved in this topic, but there are just so many “*competing priorities*”. That got me to thinking, why does sex education

have to compete as a priority? We know from other data that when adolescents can make informed decisions about their health and are at reduced risks for poor health outcomes, then they are more likely to be successful academically and yet sex education is not viewed as a priority in our state. How can teens who are pregnant or facing a HIV/STD diagnosis be focused on state tests? At that point, wouldn't the consequences of the lack of sex education act as a competing priority for academic success and performance on state tests? Additionally, a more recent competing priority is the COVID-19 pandemic. She mentioned that *“COVID-19 threw a curveball for all of us because we weren't trained how to conduct research in a pandemic”*. She said that this experience has taught us the importance of innovation and alternative plans in research, especially in a place like Mississippi.

The information she provided on her thoughts and perspectives were good, but the conversation absolutely shifted and felt much more natural when we focused on how being a native Mississippian has impacted our work in sex education. We discussed how frustrating it is because we understand how delicate conversations around sex are treated in Mississippi. Although we face challenges and frustration, we keep pushing and we keep fighting, but why? Angela put it best when she said,

*“You know the biggest thing it's frustrating, at times, just because things take a while to move here, but because I'm from Mississippi I know and understand it, I think, being from here just provides a better understanding of how and why things work. Um and just to know that it's just so many other layers of, I don't want to say issues but things that we're faced with poverty, racism, low education attainment, and these are things that I can just relate to... in my role...I often thought about my family personally like how would this impact or how can I relate to this and just being from Mississippi and having both parents and grandparents grow up, I understand just some of the background things that people from other places, may not understand. And to know that it's just not a black*

*and white answer there's often a gray area. And there are people here who...we know that Mississippi is a great place and we have wonderful people, but there are often times different things that are going on that impact, you know just the overall quality of life so for me, that that is motivation... You know, if you don't fight, you know, and I can totally relate because I've said that so many times and it's like you know it always boils down to well if you won't, who will. You know if I give up who's gonna do it, you know and. These are you know, this can impact others can impact our siblings, our cousins, you know family, I mean friends. I mean it just really has such a huge implication for people who are connected to us. So we have to just keep moving.”*

I realized that we have a drive and motivation for making Mississippi a better place because this is the place we call home. Angela said she always likes to hear about people from Mississippi doing great things and staying in the state to make it better because we lose so many great people to neighboring states. She said “*Mississippi is a special place*”. I couldn't agree more. Being a native Mississippian gives me a different perspective to my research as I have a close personal connection to issue. Sex education has the power to impact our youth, families, friends, and communities and yet it is not seen as a priority. What would happen if we could see our wildest vision become a reality, a Mississippi where every child has the power and knowledge to take control of decisions regarding their health so they may have a better quality of life? Before that vision can emerge as reality, we as leaders cannot give up hope or give up the fight. Our teachers must have the tools and be equipped to give our students the future they so rightly deserve.

My next interview was with Julia\*, a director of a local organization that supports teachers. I first met Julia in March 2020, just before the pandemic fully unfolded. I had successfully proposed for my dissertation and I was preparing for my IRB. So I contacted Julia to let her know about my dissertation and ask for permission to provide information

about their resources for participants of my survey. I remember being extremely nervous about the meeting, I'm not exactly sure why. When I approached the office, Julia met with me in a conference room and from her strong and bold presence, I instinctively knew that she was serious about her work and protecting the integrity of the organization. She asked about my PhD and dissertation process and I remember her asking something to the effect of "*Have you gotten to point where you don't see people anymore? You turn around and kids are all grown up.*" I laughed nervously of course and said yes, I completely understand. During our meeting, she was very open about asking me direct questions about my research and what I hoped to accomplish. All I can remember is being worried about saying the wrong thing and ruining my chances of having the opportunity to work with this amazing organization. Then she asked me the question that I hoped I didn't have to answer, "*What are your personal views about sex education in Mississippi*"? I acknowledged that my view on sex education was that our youth need as much information as possible to make informed decisions about their sexual health and behaviors so it can be their choice. In which she replied something to the effect of "*But realizing that for some it's not always their choice*". It was at that moment that I thought maybe I'm not as well-versed in this topic as I should be, or it could have been my nerves, but either way I knew I could learn a lot from her.

I walked away from that meeting still nervous as heck about what she thought of my research and me, but we continued to talk every now and then as I kept her updated on my progress or my lack thereof. Over the course of the last year, I have had multiple conversations with Julia about my dissertation research and her same bold and strong presence strikes me every time. She has provided me with encouragement, ideas, and she

took the time to think with me about how I could move forward when I faced challenges. I still get a little nervous talking to her, but I think I get nervous because there is so much strength and power in the work that she does and I see myself as a part of that. I don't want to let any of my fellow leaders, teachers, or students down. I'm fighting for a better Mississippi in my own way. Having the support of other leaders on this dissertation journey has been a God-given gift. There is a level of unspoken understanding between myself, Julia and other leaders that I can't quite explain. I feel like they get my fight, my challenges, and my motivation. I don't have to say anything or explain it, they just get it.

The interview with Julia shed light on some interesting perspectives and confirmed that I was moving in the right direction. In regard to their organization's work in professional development, she mentioned the importance of providing information for the "*trusted adults*" in the lives of youth. I thought the phrase "*trusted adults*" was interesting because what makes an adult "trusted"? In my mind, a trusted adult is one who is knowledgeable, provides accurate information, and is capable of guiding youth in the direction that will set them up for success. Then, how can our teachers be trusted adults if they are not adequately trained or prepared? Another topic that came up was shaming or judgment in sexual health in Mississippi. She mentioned youth being shamed in the church and having to apologize to the church for their sexual acts that lead to pregnancy. I could identify because I often think about my first experience realizing that this was a practice. I can remember the talk and gossip at church and the feeling that something bad and shameful had been attached to this individual and the behavior. I remember hearing about how someone would have to go before the deacon board and apologize, which seemed wrong to me at the time, but also that was the way things were. Most of all, I

thought about Amber and how these practices break the trust between adults and youth instead of building it. When I asked Julia about what she had learned about herself, she said,

*“...what I’ve learned about myself, I think, for myself it’s been a healing process um. Yeah I would definitely say it’s been a heal, healing process. Some of the ways that I’ve seen the topic of sex education being treated in or sexual health has not been, it’s not been okay. Even in young people shamed, put in front of the Church and I’ll say teachers are a part of the communities, like there’s no separation from a teacher being in the school setting to a teacher being in a church, like it’s still the same people and so some, a lot of those institutional values carry over. And so being able to go back into those same spaces where we’ve seen young people be shamed or other things that have happened or places where the conversation just didn’t happen and now those conversations have happened. It’s, I don’t know, it feels like a life’s work fulfilled. It feels like I’m doing what I’m supposed to do, I’m supposed to do it. And I’ve worked in other places before, I’ve worked in other states...and nothing has felt quite as affirming than the work that we have been able to do here.”*

Is it possible that’s what we are doing and why we are fighting so hard? We are fighting for a healing. She also mentioned that “...sex education and the professional development associated with it is a matter of life and health” and I had never heard it put that way before. When I began to think about it, life and health have the potential to result in greatly different outcomes. I believe that we have to ask ourselves are we making decisions that support life at the bare minimum or making decisions that will proactively and positively impact the health of our communities for the best possible outcome. When we put a focus on values and lived experiences in our professional development and sex education efforts, we can then move beyond our past, begin building trust starting with the adults in our communities, and actively put the heal back in health.

My third interview was with Allan\*, a manager of school health programs including sex education. I had previous contact with Allan in the early stages of my research and he

always seemed willing to help. When I interviewed Allan, one surprising thing was I didn't realize he was actively involved in conducting health research among both teachers and students. His perspective on the challenges of collecting data was very similar to what I had experienced as he struggled with access to schools and principals, especially during the COVID-19 pandemic. This made me feel much better about my situation just knowing that others have struggled with research in this area as well, particularly organizations I was trying to get permission from to administer my survey. I thought it was also interesting how he mentioned about how they use the data and the importance of weighted data. Most of the data is descriptive (increases and decreases from year to year) and the data could reveal a deeper story if more advanced statistical analyses are used. Additionally, he confirmed that the professional development opportunities for sex education teachers are mostly optional and the state department of education does not provide professional development opportunities, but rather works with external organizations for trainings, which was not surprising. However, it was his perspective on how being a native Mississippian helps him to collect data for sex education research that struck me as he explained,

*“So once I kind of put those two pieces together and they they kind of get familiar, they're more open to say well okay fine because even if I come into the classroom and I say y'all now, when I was here back in you know 2000 Miss H taught me math, is she still here? 'Yeah she still here!' So, once you kind of get that that that homegrown feel with them, it helps them open up and trust and they actually sit down and do it. They don't look at me just like a guy from the state coming in wanting us to do some extra work. So it helps me and then the fact that I kind of know the path that they are going to take or that they could take because I've been there, so it kind of helps me. You know, helped me kind of give them a sense of direction so it's kinda like you know well y'all should learn this stuff because if you don't you're gonna end up you know here, here, and here so it's just kind of helps me navigate a better road for them and myself so.”*



When he administers surveys, he is able to build trust and a relationship with participants (particularly students) because he knows exactly where they come from and he can identify with the path set before them. He also seemed to be more impressed with the student task force he spoke of and wanted to see more involvement with that, as this further builds trust. I could also tell his conservative nature and being aware of limitations on sex education in Mississippi as he said that the quality of sex education is “*just enough*” so it’s not overstepping boundaries between schools and families. I think this is a reflection of the southern culture of Mississippi, which greatly influences sex education and policy. However, Allan also recognized the importance of seeing the greater vision and impact as we make decisions and face challenges related to sex education in Mississippi, as he stated,

*“...it’s not about me because a lot of times I look at it like I’m given a task, I don’t want to fail like I don’t want my Supervisor to be like well I gave you this task, and you couldn’t do it. But if you take yourself out of it, I think you realize that once you’re trying to get the, the attention of the schools. You can let them know I’m not representing my office only for me, but as a state. Because these kids are going to be the ones that are going to be out there. And so, like I had one district at one time to tell me they you know, they didn’t have any issue, they didn’t want to participate. I said that’s fine you’re focusing only on you know, the kids that you graduate, the kids that you make productive citizens, they come back in and pay taxes and pay into social security, and all this stuff like that. I say, but you know also it’s the kids that are going to be the teenage moms, the ones that are going to drop out, the ones that are going to go to jail. That’s going to be a reflection of you as well and your school district because your superintendent you know your a little your, your legacy or your, your your tenure, is going to come with good and the bad. So I’m not asking for myself, I’m just saying as a state, let me come in and help us as a school because the more data we can get, the more funding we can get, and the more implementation we can get. So I say and I kind of use the same thing with them take yourself out of it, not the, the superintendent but as a district, as a state, as an administrator. So I’ve learned to just don’t take it too personal, take myself out of it, but do it for you know what it’s supposed to be, you know the schools... education, I mean the [organization] and the student as a whole.*”

My last interview was with Mark\*, a former professional development trainer for sex education. I met Mark several years ago when I attended a professional development training as a sex education instructor. I remember him being friendly, easy-going, and very passionate about supporting teachers like myself. I reached out to him for an interview and he graciously agreed to share his story. During his interview, there were some instances of situations mentioned such as struggling to ensure school districts adhere to the policy, understanding how to implement the state law, supporting schools to be compliant, facing protesters of the state law, and lack of support from school administration for professional development in sex education. The challenges and barriers that sex education leaders face in Mississippi are consistent across the interviews from the legislator to the district level. However, the drive and motivation of native Mississippians is that we see the need not just from where the state is currently but from our own experiences growing up in Mississippi as well. We can see the need from a more personal perspective. As Mark said,

*“I mean growing up here like I knew the need for it, like there, there was, I think the first classmate to become a parent was in sixth grade. There was another in seventh grade, then there were several in eighth grade then, you know it's just, it's just something that we saw a good bit, and we had a good health teacher that did talk to us about condoms and talked about sex ed and talked about STDs. Like in hindsight, there could have been more that was done like we could have received more tools, but um. Yeah I'm just seeing the need and understanding that you know abstinence only is something that we've tried in the state of Mississippi and it clearly doesn't work so let's try something else, and it was great to be a part of a team that was looking to try something else.... I mean it's Mississippi, there's there's the need, like the need is so important and you're doing stuff for young folks then there has to be moments where like pardon my French like you can't, you really can't give an F about things, and like this is so important, like I'm gonna have to continue to push and make sure that this gets done.”*

The personal connection to the need has resulted in the motivation to achieve positive outcomes through working in sex education and professional development. Mark

mentioned benefits like teachers feeling more prepared and building confidence, becoming comfortable with sensitive topics, and gaining tools, knowledge, and resources. Furthermore, on the student level he expressed that young people are not only more informed and equipped with decision-making skills, but also engaged in advocacy for sex education in Mississippi. These benefits are consistent with those in the literature as well as other sex education leaders.

In my own interview with a colleague, Christa\*, I felt that I was able to accurately convey my experiences as a sex education leader. One thing that Christa mentioned that she noticed was that my personal and professional experiences were so intertwined that they cannot be separated. I hadn't quite thought about it that way, I guess because I never had to think about it that way, but it's 110% true. Being a Mississippian as well as a sex education leader (both teacher and researcher) is a part of my identity. That also explains part of the reason I tend to choose sex education in my field of work no matter how frustrated I get or how the challenges arise. It's so deeply personal to who I am and from the interviews, I know other sex education leaders face challenges in this area too. I made the statement that in girl scouts we were always taught to leave a place better than we found it. I had not thought about that statement in a long time, but I've always lived by it. Sex education isn't just about preventing teen pregnancy or HIV and STDs. It's about teaching young people how to love themselves and others, how to respect themselves and others, how to set healthy boundaries, how to build healthy relationships, and how to communicate about subjects regarding their bodies. Sex education can have an impact on the whole child. However if we want to support healthy children holistically, we must prioritize quality sex education and the trusted adults in their lives including teachers.

That means following standards, evaluation, and assessment of sex education teachers while also providing the professional development opportunities that will lead to improved implementation and student health outcomes. I honestly believe that I can attribute much of my success to having a mother who valued sex education that was informative and respectful. I knew how to make my own decisions, I knew about risks and consequences, and I knew how to respect my body and others. It was truly a gift that set me up for life. That's what sex education is about and we should want to support teachers in the effort to instill these values and skills for our children.

As leaders in sex education, we have a distinctive experience because we're from Mississippi, we are from this place that we call home. Not only can we support one another, share frustrations, build trust and community, but also we have a shared vision. We're not just trying to do something for a paycheck, we live here and we're trying to make a difference, because we see Mississippi as home. We see the people of Mississippi as family and we're not just trying to do this for those people who are here right now, but for generations to come, because this will always be home. We will be raising our families here, we will be making new friends here, we will build a legacy, but what do we want that legacy to stand for? That's my motivation for being a sex education leader, I'm fighting for a legacy. I want that legacy to mean sex education is an avenue for greater health outcomes and a greater quality of life. I want to see sex education treated as a priority so that our Mississippi youth can make informed decisions and they can leave a legacy too. The skills learned from sex education could have a great impact on the decisions that young people make in the future including their academics, health, finances, and every area of their life. However, getting the information they need boils

down to making sure that our teachers have the information and the training they need to be prepared and developing policies that create an environment that's conducive for quality sex education. Our communities need and deserve the legacy that we see forthcoming and our home is worth fighting for.

### Discussion

The purpose of this study was to explore my experiences of sex education and professional development from my perspective as a native Mississippian. During this reflective process, I learned about my own motivations in fighting for sex education and the importance of teachers receiving the training they need to provide quality sex education. Qualitative data analysis resulted in five key emerging themes: (1) need for sex education, (2) barriers to professional development, (3) motivation to fight, (4) outcomes of professional development, and (5) vision for change.

#### *Need*

Among the data, it was undeniably clear that there is a need for sex education in Mississippi. However, the need can be viewed in two ways. First, the objective view of need is based on the statistics, facts, and figures. Previously collected data from health sources like the Centers for Disease Control and Prevention (CDC) constantly relays to the public where Mississippi stands on various health statistics compared to the rest of the nation. For some, this objective or detached view may give a false sense of improvement as we can recognize that trends in teen birth rate and pregnancy are declining. However, there are so many other systematic issues that need to be addressed to further drive behavior change and positive outcomes.

The second point of view, subjective, shows a personal connection to the need as native Mississippians. Growing up in Mississippi, I didn't have sex education in school, but I saw a number of teenagers in my circle engaging in sexual activity and getting pregnant. We were exposed to sexual language in various ways including in the media and from our peers. During my own transition into adolescence, I can remember the confusion, the secrecy, and the associated shame with even bringing up the word sex. As other sex education leaders stated, "*I saw the need*". However, seeing the need can be further explained as connecting, identifying, and experiencing the need especially in terms of the lack of access, information, and resources in rural communities.

As sex education leaders, this personal connection to the need drives our motivation for why we believe sex education is important and make it a point to work with schools and communities to further professional development efforts. Since we can connect with the need from our past experiences and identify with others who may be facing similar situations, we take on the responsibility to lead the charge for sex education that would hopefully lead to positive outcomes and behavior changes. Although the need for sex education is recognized, barriers to professional development for teachers in Mississippi often present a frustrating environment for furthering sex education efforts.

### *Barriers*

The primary barrier is that sex education is not viewed as a priority in Mississippi by higher authorities such as government and school systems. Throughout the data, it was noted multiple times that competing priorities such as standardized test takes precedence over sex education. Teachers have many responsibilities and standardized testing carries

much more weight professionally. Additionally, teachers also deal with greater problems that students may be facing such as lack of access to resources and information.

Currently, with the COVID-19 pandemic, sex education and consequently professional development has been pushed further down the priority list as teachers cope with virtual learning as well as the mental, emotional, and physical trauma of the pandemic.

Furthermore, the pandemic has exacerbated underlying systemic issues such as how we address these traumas in schools. While COVID-19 has certainly presented challenges, there have been several inconsistencies across the board since the implementation of sex education in Mississippi contributing to barriers to professional development.

In shared experiences with other sex education leaders, it was recognized that teachers who have not received professional development are not as prepared, feel inadequate professionally, and at times do not even want to take on the responsibility of teaching sex education. This is often due to inconsistencies in a number of areas. First, curriculum and resources vary across districts. Decisions on which curriculum to use could be attributed to available funding. Second, the media plays an important role in not only presenting sexual information through computer or television screens and music, but also the evolving language in which sexual acts or terms are described. The sexual nature of the media often leads to myths, making it difficult to distinguish what is true from what is false. For teachers who are not familiar with popular culture, feelings of inadequacy may be intensified. Third, the lack of support from schools and administration may result in teachers not receiving the professional development that they need as time is seen as a commodity and must be used towards priorities or what is deemed important by administration. Finally, the lack of oversight and enforcement of

sex education policies in the state law means that schools are not held accountable for ensuring their teachers have the resources and information necessary. Thus, this leads to inconsistency from school to school in how sex education is implemented even though abstinence is the focus per the state law.

Abstinence-based sex education states that the only way to fully prevent transmission of sexually transmitted diseases (STD) and unintended pregnancy is to refrain from any and all sexual activity until marriage (Santelli, Ott, Lyon, Rogers, Summers, & Schleifer, 2006). This type of sex education often includes little to no information on contraceptives or condom use. Although several states rely on abstinence-based sex education programming, abstinence education has been shown to be ineffective in reducing rates for teen pregnancy (Stanger-Hall & Hall, 2011; Santelli, Ott, Lyon, Rogers, Summers, & Schleifer, 2006). In fact, research has reported that there is a positive correlation between abstinence-based programming and teen pregnancy rates (Stanger-Hall & Hall, 2011). The conservative culture of Mississippi reflects how we address sex education and professional development through abstinence education. Church, faith, and spirituality are important elements of Mississippi's culture leading to the state being categorized in the Bible belt region of the nation. The emphasis on moral character and God, leads to people associating sex before marriage with a sinful nature. This often results in punishing those who have engaged in sex outside of marriage with shame. However, this technique is not only seen in churches, but is also reflective in personal views and the state law.

Personal experiences, viewpoints, and values often carry over into other settings. Previous studies have shown that identity is connected to teaching methods, personal



sexual biographies and experiences influence views on sexual education, sexual diversity is a challenging issue, and teacher-student relationships are affected by school structures as well as language and identity. Teacher perspective and reflection on past experiences is critical for advancing how sex education is taught (Beyers, 2013; Beyers, 2012; Kehily, 2002). For teachers who embody the conservative Bible Belt culture, these views may be reflected in how they teach sex education. Thus, resulting in an approach that could be shameful, unsafe, and uncomfortable for students. Furthermore, this culture is also reflected among the individuals who are responsible for laws and policies impacting sex education. Rather than focusing on developing policies that educate and inform decision-making about sex from a comprehensive perspective, legislators endorse policies reflecting fear, shame, and exclusion.

### *Motivation and Fight*

Barriers are present, however, it is more important to seek how we use our nativeness, understanding, and connectedness to work through those barriers as sex education leaders. As native Mississippians, we have not only a personal connection, but also an intimate understanding of why progress moves so slowly. This allows us to understand and work through barriers we face in a way that non-natives cannot understand. While it is frustrating, our connectedness to our home and people fuels the motivation to push through the frustration, overcome barriers, and fight for change.

Throughout this process, I often asked myself, “why do I keep fighting for sex education and professional development?” I’ve run into so many challenges while trying to accomplish this research that I began to question if the fight was even worth it. However, I realized that I was not alone as other sex education leaders expressed their

frustration with working for improved quality of sex education and professional development in Mississippi. Frustration was associated with “Mississippi’s needle moving so slow” illustrating that it takes a long time to see progress in the state. Sex education leaders also identified frustration with immense systemic challenges our communities face such as poverty, racism, low education attainment” as well as the historical and cultural challenges that result in many treating sex as a taboo topic and shameful treatment of others. However, it is that same frustration along with our personal connection to the culture that also motivates us to push for sex education and professional development.

Our connection to our communities and the people of Mississippi, guides us in seeing a greater vision for our youth. We want them to have something greater than what we had as a young person growing up in Mississippi. We have personally experienced the need, faced the barriers, and can now visualize the impact from a place of connectedness. This is more than about us or about a job, but the people we serve because they are a part of us. In the transition from youth to adulthood, we now know our responsibility in this fight to drive change and positive outcomes for all stakeholders including both teachers and students.

### *Outcomes*

Professional development has positive outcomes on multiple levels. First, professional outcomes for teachers result in feeling more prepared to address topics related to sex education and answer questions that may be considered sensitive in nature. Further training provides teachers with the tools necessary to build confidence in the classroom. By receiving appropriate training, sex educators will also be able meet

expectations through adherence to policies. Furthermore, they will have a better understanding of how their personal experiences and values impact their teaching methods resulting in a more safe and comfortable environment for students. Proper training not only impacts teachers, but also students.

Students who have been taught by trained sex educators can make more informed decisions about their sexual health. Although students may decide to engage in sexual activity, they will have the information and resources to ask questions and potentially protect themselves from teen pregnancy and STDs using contraceptives. Additionally, students' participation in advocacy efforts for sex education is critical in defining how we approach the topic of sex education with young people and equip the trusted adults in their lives to provide holistic support. While teacher and student outcomes are key, perhaps the most important outcomes are those in the overall system.

Addressing research and evaluation can lead to changes in funding and policy, thus changing the trajectory of sex education in Mississippi. Additional research on where teachers stand in professional development can result in more evidence for how training impacts sex education implementation. Although, some of this information is collected through the CDC's School Health Profiles, with data from more extensive research and evaluation, schools and other organizations that support sex education in the state can procure more funding to further sex education efforts.

Evaluation strategies that determine how well teachers meet various standards, such as the Professional Learning Standards for Sex Education (PLSSE) created by the Sex Education Collaborative (SEC) can also be beneficial in meeting teacher needs and improving the quality of sex education. PLSSE standards may be used to inform teachers

of current teaching practices, plan and implement professional development opportunities, and assess proficiency of teachers (Sex Education Collaborative, 2018). Currently, Mississippi does not follow any national standards for professional preparation or professional development in sex education, posing a serious threat to sex education implementation and health outcomes. However, including evaluation strategies as a part of the state sex education law can inform policy decisions in the future.

### *Vision for change*

As sex education leaders, we are most interested in how Mississippi can move forward to not only improve the quality of sex education for our youth, but also support those responsible for sex education. From our experience, we can see the changes that need to be made in order to accomplish the vision of better sex education programs for our youth. We must first value youth engagement as part of the development for sex education trainings for adults. By receiving input from those who are directly impacted by this information and efforts, we can ensure that we are creating the best curriculum to meet the needs of our students. It will also be imperative to include community approach to sex education where schools, families, communities, organizations, and other stakeholders work collaboratively to bring about change. From the government perspective, we need policy changes that will better support training such as the use of standards, the development of assessment and evaluation protocols, the improvement of resources and curricula, and regulated or required professional development opportunities to provide the consistency necessary to ameliorate teacher preparedness and sex education implementation. Subsequently, with these changes we can expect to see health outcomes that will further reduce rates of teen pregnancy and STDs.

## Conclusion

The purpose of this study was to explore my experiences as a native Mississippian sex education leader and cultural factors that influenced sex education and professional development. This autoethnographic reflection has revealed that my personal experiences with sex education, from youth to adulthood, in the context of being a native Mississippian motivates me as a leader. My cultural upbringing and past experiences not only allows me to recognize challenges in sex education from multiple perspectives including student, instructor, researcher, and leader, but also drives me to fight harder to overcome those barriers. Building relationships with other sex education leaders who are native Mississippians fosters a cohesive vision as we work towards positive outcomes in sex education and professional development. With an intimate understanding of the conservative southern culture, we can identify with those in our communities to further build trust between youth and adults and nurture informed decision making that lead to healthier futures. Furthermore, barriers to sex education and professional development are primarily related to lack of prioritization and inconsistencies both professionally and systemically also deeply rooted and conservative southern culture. However, positive outcomes such as teacher preparation, informed students, and systematic changes related to funding, research, and policies are evident.

This study suggests that while the culture of Mississippi has indeed hampered sex education and professional development, the culture of Mississippi also serves as motivation to fight for a better quality of life. Exploring personal experiences and

engaging those who are native Mississippians in more sex education work could lead to more consistent policies, professional development opportunities, community relationship building, and higher prioritization. By further understanding and dismantling cultural factors that lead to shaming and harm, we can begin to move forward into a vision that supports the people of Mississippi through growth, trust, and healing.

## CHAPTER V –SUMMARY

### Summary of the study

The state of Mississippi has led the nation in high rates of teen pregnancy and sexually transmitted diseases among adolescents, despite mandating sex education in public schools for over a decade (SIECUS, 2011; SIECUS, 2016; SIECUS, 2017). While there has been emphasis placed on the content of sex education in the state, focused on an abstinence based curriculum, there has been little efforts to understand the role of professional development in sex education. Previous national studies have shown that professional development for sex educators leads to more prepared and confident teachers, who can address controversial issues, and implement sex education effectively (Wight & Buston, 2003; Ollis, 2010; Tietjen-Smith, Balkin,& Kimbrough, 2014; Clayton, Brener, Barrios, Jayne, & Jones, 2018). Thus, additional training can result in improved outcomes for adolescents (Eisenberg, Madsen, Oliphant, & Resnick, 2010; Eisenberg, Madsen, Oliphant, & Resnick, 2011). However, in Mississippi the inconsistencies between expectations and implementation of the state law, professional development, and professional preparation results in less prepared and confident teachers, poor implementation, and poor outcomes. Although studies conducted among Mississippi sex educators in the K-12 setting have shown that teachers receive very little to no professional development and desire more training, there is little supporting evidence to understand the position of professional development relative to sex education implementation in the state (Kolbo, Werle, Ismail, Arrington, Harbaugh, & Esters, 2015; Arrington, Ismail, Werle, Esters, Frederick, Ellis, & Kolbo, 2018).

The purpose of this study was to use a mixed methods design to determine the relationships among professional preparation, professional development, and sex education implementation as well as to explore cultural factors that impact sex education and professional development in Mississippi. In the quantitative study, secondary data from the 2016 and 2018 CDC School Health Profiles was used to construct a structural equation model based on literature. Then, the model was analyzed to determine how well the model fit the data. It was hypothesized that professional development acts as a moderator, strengthening the relationship between professional preparation and sex education implementation among Mississippi K-12 lead health educators. This relationship was further explored through a cultural lens using an autoethnographic approach.

Autoethnography is form of qualitative method that explores a researcher's personal experiences and culture through writing (Adams, Ellis, & Jones, 2015; Chang, 2008). Since Mississippi is a rural southern state, the cultural context often influences how sex education and professional development are approached on multiple levels (Blinn-Pike, 2008; Jones, Jensen, & Selzer King, 2014; DePalma & Francis, 2014). Given my cultural identity as a native Mississippian, I wanted to further dissect my experiences to explore the cultural factors that influence sex education as well as barriers to and outcomes of professional development. Using Chang's (2008) autoethnography methods, I used writing prompts to recollect personal memory data of my experiences of sex education as a student, instructor, and researcher. Furthermore, I supplemented personal memory data with external interviews of other sex education leaders who also identified as native Mississippians, field notes, and textual artifacts. Qualitative data was



collectively analyzed to determine emerging themes. Collectively, the goal of these two studies was to provide evidence further validating the importance of professional development for sex education implementation in Mississippi.

### Findings and Discussion

Results showed that both quantitatively and qualitatively, professional development not only strengthens the relationship between professional preparation and sex education implementation, but also leads to positive outcomes as identified through the autoethnographic study. Through the structural equation model, it was evident that professional preparation alone did not have a significant relationship with sex education implementation. This suggests that regardless of the professional background of the teacher, they may not have the strategies and methods to improve student knowledge, address sexual health topics, and assess students. Therefore, continuing professional development opportunities such as workshops, seminars, and conferences are critical to improved sex education implementation. Although the data clearly shows that professional development significantly changes the relationship, it is imperative to recognize the cultural factors that impede professional development efforts.

Culture and community identity, particularly in the rural setting, has been shown create barriers to sex education and professional development (Blinn-Pike, 2008; Jones, Jensen, & Selzer King, 2014; DePalma & Francis, 2014). Data from the autoethnographic study was consistent with previous studies as sex education leaders expressed that teachers face several barriers related to lack of prioritization, resources, access, information, and support from school administration. These barriers are further complicated by the conservative Bible Belt culture that associates sex with sin and

shame. Furthermore, teachers who embody the conservative Mississippi culture risk projecting their personal views on students creating an uncomfortable and unsafe learning environment for students. While these barriers exist as a result of the culture, native Mississippian sex education leaders expressed positive outcomes of professional development as well as a personal connection to the need for sex education, which motivates them to fight for change.

Although the structural equation model detected a significant change in the relationship when professional development is present, it does not explain the outcomes of professional development. In the qualitative study, outcomes to professional development were identified for teachers, students, and the system as a whole. Teachers become more prepared and confident in implementing sex education as well as acknowledging how their personal views affect students and communities. Students are able to become more informed, build decision-making skills, and advocate for sex education. The system is impacted by more opportunities for funding, policy, and research. Whereas the structural equation model provides the numerical evidence of the influence of professional development, sex education leaders' lived experiences provide meaning behind not only what the outcomes are, but also why the outcomes exist.

In order for positive outcomes to exist, someone or some effort has to champion professional development. Sex education leaders who are native Mississippians are motivated to fight for sex education and professional development because they have first-hand knowledge of the needs, frustrations, and historical overtones as a member of the culture. Their nativeness allows for a higher level of consciousness and understanding for why challenges are present and how to overcome those challenges. Furthermore, sex

education leaders continue to champion sex education and professional development because there is a shared vision of growth, trust, and healing for Mississippi youth to achieve a greater quality of life.

### Implications and Future Directions

Evidence from this study can be used to further professional development on multiple levels. On state, district, and school levels, data from this study supports policy changes such as incorporating requirements for professional development assessments, evaluations, and opportunities into the state law as following professional development standards such as those developed by the Sex Education Collaborative. This would ensure that teachers not only have the strategies and methods to effectively implement sex education, but also adhere to state policies on the content of sex education.

Furthermore, changes to how professional development is approached will lead to strengthened curriculum fidelity, consistency in teaching strategies, increased knowledge and skills, increased comfort with sex-related topics, and feeling more prepared to teach sex education courses. Additionally, benefits extend to students as they can receive higher quality sex education, increase their knowledge, receive accurate information, and improve sexual health (Warwick, Aggleton, & Rivers, 2005; Wight & Buston, 2003).

For future directions, more research on how to further prioritize sex education and professional development in Mississippi is necessary by exploring current resources including how to apply the Professional Learning Standards for Sex Education in rural communities. It is also important to use a community-based approach to research methods in the future to engage those impacted the most by policy decisions in sex

education. Lastly, further research should focus on the student perspective of teacher preparedness and how it impacts their experience of sex education in the classroom.

### Conclusion

In conclusion, the results from this study further validate the conceptual framework that professional development in conjunction with professional preparation leads to improved sex education implementation and outcomes. Understanding the position of professional development statistically and related cultural factors has the potential to change the trajectory of sex education and the quality of life for youth in Mississippi. Data from this study should be used to inform Mississippi sex education laws and policies that better support teacher training and professional development opportunities to improve sex education overall.

## APPENDIX A

### Qualitative Instrument: Semi Structured Interview (Sex education leaders)

Hello. Thank you so much for your consent to participate in today's interview. My name is Joyee Washington and I am a doctoral student at the University of Southern Mississippi. You have been asked to participate in an interview where I will be asking you questions about your perceptions on professional development as a leader in sex education in Mississippi. In our interview, I will ask you a series of questions and please feel free to express yourself and share your experiences. Everything that is said will be kept confidential and your name will not be used. I will be recording our session using an audio recording device. This recording will only be used to help me make sure that I am hearing your statements correctly. The recordings will be deleted once the study has been completed and findings are reported, approximately two years. If at any time, you feel uncomfortable, please feel free to stop or pass on a question. We can come back to it if you would like or you can choose not to answer a question. I am only asking for your opinion, so there are no right or wrong answers. However, I may ask you to explain an answer more for clarification. Do you have any questions for me before we begin?

1. Tell me about (*describe*) your current position. What is your primary role in sex education?
2. Tell me about how you got involved in sex education.
3. What experiences do you have teaching sex education, if any?
4. How have you been trained to be a leader in sex education?
5. What are your thoughts on sex education curricula used across Mississippi schools?
6. How has professional development on sex education been impacted by the Mississippi state law?
7. What are your thoughts on the quality of sex education in Mississippi?
8. What has been your experience with preparing teachers to address controversial topics (abortion, contraceptives, LGBTQ+)? (*split into two questions*)
9. What are some barriers to providing professional development for teachers as it relates to:
  - a. demonstrating comfort with and commitment to sex education?
  - b. diversity (safe and inclusive classroom environment, diverse background, etc.) in sex education?
  - c. gaining sufficient and current knowledge of topics related to sex education (such as sexual development, biological, emotional, and social aspects)?
  - d. making legal and ethical decisions?
  - e. planning for sex education lessons and instruction?
  - f. implementing effective teaching strategies?
  - g. assessing student learning in sex education?
10. What have been your experiences with providing professional development in sex education?

- a. What types of professional development opportunities have your organization provided related to sex education?
  - b. What topics do you cover in the professional development you provide?
  - c. What topics don't you cover in the professional development you provide?
11. What impact does professional development have on sex education teachers?
12. How would you like to see professional development changed for sex education in Mississippi?
13. What other resources do you think Mississippi teachers need to implement sex education effectively?
14. What are your suggestions for improving the quality of professional development for sex education in Mississippi? (*if you had the opportunity to improve professional development what would you suggest*)
15. As a leader in sex education, what do you believe about the impact of professional development on student health outcomes?
16. How has the COVID-19 pandemic impacted sex education in Mississippi?
  - a. What challenges have you seen as far as professional development?
  - b. What are you or your organization doing to mitigate the challenges from the COVID-19 pandemic
17. How has your experience being a native Mississippian impacted your perspective on your work in sex education?
18. Do you have anything else you would like to add about your leadership experience in sex education and professional development?

APPENDIX B

Table 1: Quantitative SEM variables and item matrix

Construct/Latent Variable	Observed Variable	Questionnaire Item (Scales are Y/N unless denoted by *)
Professional Preparation	Certification	Currently, are you certified, licensed, or endorsed by the state to teach health education in middle school or high school?
	Emphasis area	What was the major emphasis of your professional preparation?* <ul style="list-style-type: none"> <li>a) Health and physical education combined</li> <li>b) Health education</li> <li>c) Physical education</li> <li>d) Other education degree</li> <li>e) Kinesiology, exercise science, or exercise physiology</li> <li>f) Home economics or family and consumer science</li> <li>g) Biology or other science</li> <li>h) Nursing</li> <li>i) Counseling</li> <li>j) Public health</li> <li>k) Nutrition</li> <li>l) Other</li> </ul>
	Years of Experience	Including this school year, how many years of experience do you have teaching health education courses or topics?* <ul style="list-style-type: none"> <li>a) 1 year</li> <li>b) 2 to 5 years</li> <li>c) 6 to 9 years</li> <li>d) 10 to 14 years</li> <li>e) 15 years or more</li> </ul>
Professional Learning	Implementation Preparation	Are those who teach sexual health education at your school provided with each of the following materials? <ul style="list-style-type: none"> <li>a) Goals, objectives, and expected outcomes for sexual<sup>[SEP]</sup> health education</li> <li>b) A written health education curriculum that includes<sup>[SEP]</sup> objectives and content addressing sexual health education</li> <li>c) A chart describing the annual scope and sequence of<sup>[SEP]</sup> instruction for sexual health education</li> </ul>

		<ul style="list-style-type: none"> <li>d) Strategies that are age-appropriate, relevant, and actively<sup>[1]</sup><sub>SEP</sub> engage students in learning</li> <li>e) Methods to assess student knowledge and skills related to<sup>[1]</sup><sub>SEP</sub> sexual health education</li> </ul>
		<p>Does your school provide curricula or supplementary materials that include HIV, STD, or pregnancy prevention information that is relevant to lesbian, gay, bisexual, transgender, and questioning youth (e.g., curricula or materials that use inclusive language or terminology)?</p>
	<p>Professional Development Received</p>	<p>During the past two years, did you receive professional development (e.g., workshops, conferences, continuing education, any other kind of in-service) on each of the following topics?</p> <ul style="list-style-type: none"> <li>a) HIV prevention</li> <li>b) Human sexuality</li> <li>c) Pregnancy prevention</li> <li>d) STD prevention</li> </ul>
		<p>During the past two years, did you receive professional development (e.g., workshops, conferences, continuing education, any other kind of in-service) on each of the following topics?</p> <ul style="list-style-type: none"> <li>a) Teaching students of different sexual orientations or gender identities</li> </ul>
	<p>Professional Development Received Continued</p>	<p>During the past two years, did you receive professional development (e.g., workshops, conferences, continuing education, any other kind of in-service) on each of the following topics related to teaching sexual health education?</p> <ul style="list-style-type: none"> <li>a) Aligning lessons and materials with the district scope and<sup>[1]</sup><sub>SEP</sub> sequence for sexual health education</li> <li>b) Creating a comfortable and safe learning environment for students<sup>[1]</sup><sub>SEP</sub> receiving sexual health education</li> <li>c) Connecting students to on-site or</li> </ul>



		<p>community-based sexual health services</p> <p>d) Using a variety of effective instructional strategies to deliver sexual health education</p> <p>e) Building student skills in HIV, other STD, and pregnancy prevention</p> <p>f) Assessing student knowledge and skills in sexual health education</p> <p>g) Understanding current district or school board policies or curriculum guidance regarding sexual health education</p>
Implementation	Student Knowledge	<p>During this school year, have teachers in your school tried to increase student knowledge on each of the following topics in a required course in any of grades 6 through 12?</p> <p>a) HIV prevention</p> <p>b) Human sexuality</p> <p>c) Pregnancy Prevention</p> <p>d) STD prevention</p>
	Student Assessment	<p>During this school year, did teachers in your school assess the ability of students to do each of the following in a required course for students in each of the grade spans below?</p> <p>a) Comprehend concepts important to prevent HIV, other STDs, and pregnancy</p> <p>b) Analyze the influence of family, peers, culture, media, technology, and other factors on sexual risk behaviors</p> <p>c) Access valid information, products, and services to prevent HIV, other STDs, and pregnancy</p> <p>d) Use interpersonal communication skills to avoid or reduce sexual risk behaviors</p> <p>e) Use decision-making skills to prevent HIV, other STDs, and pregnancy</p> <p>f) Set personal goals that enhance health, take steps to achieve these goals, and monitor progress in achieving them</p> <p>g) Influence and support others to avoid or reduce sexual risk behaviors</p>
	Sexual Health topics	<p>During this school year, did teachers in your school teach each of the following sexual health topics in a required course for students in each of</p>

		<p>the grade spans below?</p> <ul style="list-style-type: none"> <li>a) How HIV and other STDs are transmitted</li> <li>b) Health consequences of HIV, other STDs, and pregnancy</li> <li>c) The benefits of being sexually abstinent</li> <li>d) How to access valid and reliable health information, products, and services related to HIV, other STDs, and pregnancy</li> <li>e) The influences of family, peers, media, technology and other factors on sexual risk behaviors</li> <li>f) Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy</li> <li>g) Goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy</li> <li>h) Influencing and supporting others to avoid or reduce sexual risk behaviors</li> <li>i) Efficacy of condoms, that is, how well condoms work and do not work</li> <li>j) The importance of using condoms consistently and correctly</li> <li>k) How to obtain condoms</li> <li>l) How to correctly use a condom</li> <li>m) Methods of contraception other than condoms</li> <li>n) The importance of using a condom at the same time as another form of contraception to prevent both STDs and pregnancy</li> <li>o) How to create and sustain healthy and respectful relationships</li> <li>p) The importance of limiting the number of sexual partners</li> <li>q) Preventive care (such as screenings and immunizations) that is necessary to maintain reproductive and sexual health</li> <li>r) Sexual orientation</li> <li>s) Gender roles, gender identity, or gender expression</li> <li>t) The relationship between alcohol and other drug use and sexual risk behaviors</li> </ul>
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# APPENDIX C – IRB Approval Letter

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## **IRB- 20- 298 - Modification: Modification - Expedited and Full**

do- not- reply@cayuse.com <do- not- reply@cayuse.com>

Wed 5/26/2021 3:56 PM

To: .byee Washington <.byee.Esters@usm.edu>; Kyna Shelley <Kyna.Shelley@usm.edu>

**Office of  
Research Integrity**



118 COLLEGE DRIVE #5125 • HATTIESBURG, MS | 601.266.6576 | USM.EDU/ORI

### **Modification Institutional Review Board Approval**

The University of Southern Mississippi's Office of Research Integrity has received the notice of your modification for your submission An Assessment of Professional Development Among Mississippi Sex Educators (IRB #: IRB- 20- 298).

Your modification has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: IRB- 20- 298

PROJECT TITLE: An Assessment of Professional Development Among Mississippi Sex Educators

SCHOOL/ PROGRAM: School of Education, Educational Research and Admin

RESEARCHER(S): .byee Washington ,Kyna Shelley

IRB COMMITTEE ACTION: Approved

7. Research on individual or group

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