2017

EXPLORING THE RELATIONSHIP BETWEEN CHILDHOOD SEXUAL KNOWLEDGE ACQUISITION AND ADULT SEXUAL SELF-ESTEEM

Guy Ray Backlund

Let us know how access to this document benefits you.
Follow this and additional works at: https://scholarworks.umt.edu/etd

Recommended Citation
https://scholarworks.umt.edu/etd/11044

This Dissertation is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
EXPLORING THE RELATIONSHIP BETWEEN CHILDHOOD SEXUAL KNOWLEDGE ACQUISITION AND ADULT SEXUAL SELF-ESTEEM

By

GUY RAY BACKLUND

Master's Degree in Clinical Mental Health Counseling, Gonzaga University, Spokane, WA, 2014
Bachelor's Degree, Human Resource Development, BYU, Provo, UT, 1988

Dissertation
presented in partial fulfillment of the requirements
for the degree of

Doctor of Philosophy
Counselor Education and Supervision

The University of Montana
Missoula, MT

May 2017

Approved by:

Scott Whittenburg, Dean of The Graduate School Graduate School

Veronica Johnson, Chair
Counselor Education and Supervision

John Sommers-Flanagan
Counselor Education and Supervision

Cathy Jenni
Counselor Education and Supervision

Kirsten Murray
Counselor Education and Supervision

Patty Kero
Educational Leadership
Dedication and Acknowledgements

This dissertation is dedicated to all those who learned about sex and sexuality in ways that created pain in their lives. I hope to eventually educate parents in a way that will diminish the pain that may come from uninformed or neglected childhood sex education.

To my wife Michelle, who watched the agony of my journey, I express my complete gratitude and praise for her dedicated encouragement and love. I would have never been able to do this without her support, trust, devotion, and truly amazing courage when all seemed impossible.

I could not have chosen a committee chair that would have been a better fit. Dr. Veronica Johnson (Roni) provided consistent support, always encouraging me to finish this test of endurance. Roni is an amazing editor, organizer, and efficient in every way. I was so grateful to have her as my dissertation chair.

Additionally, the professors on my committee were a helpful and amazing support. I would like to give a special acknowledgement to Dean Evans whose advocacy made it possible to complete my education. She truly fights for the students in her college.

I am grateful to my step-children, Tasha, Caroline, David, Lara, and Sarah, along with their perfect spouses, who supported me in many ways through this experience and a special thanks to my grandchildren, whose sweet smiles and unconditional love was life giving.

And to Michelle’s and my siblings, Robert, Marianne, Melinda, Connie, Frankie, Carla, Pam, and Dan, who supported us through the entire eight-year journey, we are sure they are as ready for us to be finished as we are, having to provide for us in times of need emotionally, temporally, and spiritually.

Another huge thank you to our good friends, Dr. and Mrs. Holbrook, who allowed us to live in their beautiful pool house while we finished our M.A.’s, much gratitude and respect.

I also acknowledge my Heavenly Father’s hand in my life that enabled me to accomplish this difficult achievement.
Abstract

Chairperson: Veronica Johnson

This dissertation investigated the relationship between sexual knowledge acquisition components (parents, sex education, religion, peers, siblings, media and pornography) in both learning and experience, age of first learning and first sexual experience, and quality of learning and first sexual experience in correlation to the construct of sexual self-esteem. Participants (N = 195) were college undergraduate students from the University of Montana and Gonzaga University between the ages of 18 and 25. A standard multiple regression analysis was performed, and between groups ANOVA post hoc analyses investigated comparisons of sexual knowledge acquisition components by Sexual Self-Esteem Inventory scores (SSEI) (Zeanah & Schwartz, 1996) and quality of sexual learning scores. The results revealed that the multiple regression model only accounted for 2.8% ($R^2 = .028$) of the variance in SSEI scores. Peers were selected by the majority of participants as their main source of sexual learning and experience. There were no significant differences between specific sources of sexual knowledge and SSEI scores. Post hoc analyses of variance revealed that those who learned about sex from their parents scored significantly higher on ratings of the quality of learning than all other sources of learning. However, participants also indicated that parents were the most absent source of learning next to religion. Implications and future research focus on the need for parents to understand the importance and potential influence they can have when teaching their children about sex. More research is needed on the relationship and effects of peers as the main disseminators of child sexual knowledge acquisition to adult sexual esteem and functioning.
# Table of Contents

Chapter 1: Introduction to the Study ................................................................. 1  
  Background of the Study .............................................................................. 5  
    Statement of the Problem ........................................................................... 6  
    Purpose of the Study .................................................................................. 7  
    Significance of the Study .......................................................................... 7  
    Primary Research Question ...................................................................... 7  
    Hypotheses .................................................................................................. 8  
    Definition of Terms ................................................................................... 9  
    Limitations ................................................................................................ 10  
    Delimitations ............................................................................................. 11  
    Summary ................................................................................................... 11  

Chapter 2: Review of the Literature .............................................................. 13  
  Difficulty of Child Research ....................................................................... 14  
  Child Sexual Knowledge Acquisition Components .................................. 15  
    Parents/Guardians ..................................................................................... 15  
    Formal Sex Education – Schools ............................................................... 19  
    Religion/Spirituality .................................................................................. 24  
    Siblings ...................................................................................................... 27  
    Peers .......................................................................................................... 29  
    Media ........................................................................................................ 33  
    Pornography ............................................................................................... 35  
  Early Childhood Experiences .................................................................... 37  
    Child Sex Play ............................................................................................ 37  
      Child Sexual Behavior Problems .............................................................. 38  
    Child Sexual Abuse ................................................................................... 41  
    Impact of Child Sexual Abuse on Intimate Relationships ......................... 43  
  Sexual Self-Esteem – Implications for Sexual Health .................................. 46
Implications.................................................................................................................. 82
Limitations ................................................................................................................... 83
Future Research .......................................................................................................... 85
Summary ....................................................................................................................... 87
References .................................................................................................................. 88
Appendix A: Demographic Survey .............................................................................. 100
Appendix B: Sexual Self-Esteem Inventory ................................................................. 106
List of Tables and Figures

Table 1: Total number and percentage of reported sources of sexual knowledge ..................67
Table 2: Descriptive Statistics ........................................................................................................68
Table 3: Total number and percentage of child sexual experience acquisition components ......68
Table 4: Nonparametric correlations for age and quality of learning and experience to the SSEI .................................................................................................................................70
Table 5: Unique contributions of each predictor variable to SSEI scores ...................................73
Table 6: Mean item scores on the SSEI by sources of learning ......................................................74
Table 7: Quality of learning mean scores by sources of learning .................................................74
Figure 1: Reported least likely to be endorsed as influential sources of learning ......................67
Figure 2: Correlation between age of learning and quality of learning ......................................71
Figure 3: Correlation between quality of learning and quality of experience ............................71
Figure 4: Correlation between age of learning and age of experience .......................................72
Chapter One: Introduction

In modern culture, love, sexuality, and relationship expectations are romanticized to a degree that oftentimes exceeds reality (Abrams, 2012). Abrams reported that people meet, fall in love, and begin intimate relations only to realize that it is not always the experience they anticipated. Intimate relationships are challenging and often affected by immediate stressors such as hurt feelings, jealousy, lying, and betrayal (Miller, 2012). Less obvious relationship stressors may stem from childhood, specifically, how adults gain their initial information about sex and sexuality as children. For example, parental awkwardness and negative feelings about their own sexuality can transfer to the child (Pluhar, Jennings & Dilorio, 2006), children might experience pressure or coercion from a friend to participate in sexual activity (Haugaard, 1996), or they may be unintentionally exposed to pornography (Wright, 2014).

Sexuality is a major part of childhood development (Lamb & Plocha, 2014) and is influenced by many experiences, perhaps originating with the method by which children acquire knowledge about sex. There are diverse ways in which children acquire knowledge about sex and sexuality that have been investigated in this study such as; parents/guardians, siblings and peers, sex education, religion/spirituality, media, pornography, child sex play, and sexual abuse. Research suggested that many of these sexual knowledge acquisition venues have a positive and/or negative influence on adult relationship functioning (Haugaard & Tiley, 1988). The purpose of this study was to explore the various methods of childhood sexual knowledge acquisition, and their potentially predictive relationship with sexual self-esteem in adulthood. Understanding how childhood sexual knowledge acquisition contributes to adult sexual self-esteem has informed the literature acknowledging the impact of child sexual abuse (CSA) on adult relationship functioning, but neglected to acknowledge the various other methods of
childhood sexual knowledge acquisition and how these influence adult relationships. Martin, Luke and Verduzco-Baker (2007) stated that “the vast majority of the extant research on sexuality and early childhood is tied to the social problem—childhood sexual abuse—while other aspects of sexuality in childhood are completely ignored” (p. 235). The implications of this research will inform parent-education as well as adult relationship education.

Research related to childhood experiences is complex, as the methods commonly employed are limited to interviews with parents/guardians or adult retrospective recall (Lamb & Plocha, 2014). Research exploring sexual experiences is nearly impossible to conduct with children because of the inappropriate nature of asking children sexually-related questions, and the restrictions protecting their innocence and privacy (de Graaf & Rademaker, 2006). The current study relied on adult retrospective recall and self-report measures of sexual self-esteem. This research method has shown limitations of accuracy compounded by variables of unreliable memory, diverse environmental situations, inaccurate observation, and maturation (Lamb & Plocha, 2014). Notwithstanding, the benefits of this research outweighed the limitations. The goal of this study was to understand the relationship between childhood sexual knowledge acquisition and adult sexual self-esteem, in order that the counseling profession, child protective organizations, and sexual health resources could better support the educational and relationship needs of children and young adults. This research may also aid parents and caregivers in their preparations to engage in healthy and productive conversations with children about sex.

Some researchers have called for closer investigation of what they referred to as the dark side of child sex play as opposed to others who believed that children are sexual beings naturally experimenting with their developing sexuality (Okami, Olmstead, & Abramson, 1997). For instance, when children have experienced unwanted or unintended sex play, could these
experiences change their feelings, thoughts, and behaviors about themselves in the same way as sexual abuse? Is there a correlation between these childhood sexual knowledge acquisition components and the way adults feel about sexuality in intimate relationships? Conversely, does learning about sex in a perceived positive manner from a parent or guardian have a positive relationship with sexual self-esteem as adults engage in intimate relationships? The literature review has assisted with the understanding of childhood sexual knowledge acquisition methods and provided rationale for exploring the relationship between the method, quality, and age that a child learns about sex, and adult sexual self-esteem.

Historically, parents/guardians were designated as the primary source of sexual education for children; yet, parental competencies were inconsistent, depending on the confidence and skills held by the parents/guardians (Pluhar, et al., 2006). Child sex play is another naturally occurring venue for sex education (Lamb & Plocha, 2014). Other sources of sexual knowledge acquisition vary based on environment and happenstance. Almy, Long, Lobato, Plante, Kao, and Houck (2015) suggested that sibling influence may have been one of the main factors contributing to teen sexual activity. Bulat, Ajdukovic and Ajdukovic (2016) reported, however, that sexual information obtained from peers was the most influential, specifically if parents and families had not instilled sexual understanding and values in their children by late childhood or early teens. Sex education courses in schools were said to have brought a more helpful awareness to children, if available. Even though religious organizations varied on how intentional they were in delivering sex education, many strove to influence their members, specifically young children and adolescents, on the importance of healthy sexuality (Landor, Simons, Simons, Brody & Gibbons, 2011). Unfortunately, other obvious sources of knowledge acquisition came through the media (Firestone, Firestone, & Catlett, 2006), pornography,
(Wright, 2014) and childhood sexual abuse or molestation (Colman & Wisdom, 2004). The influence that these experiences had on adult relationship functioning varied by the nature of the child’s experience and the innate resilience of that individual (Lamoureux, Palmieri, Jackson, & Hobfoll, 2012).

Much of the research conducted on early childhood sexual experiences had utilized qualitative methods (Grange, 2008; Morgan, 2008; Wansley, 2007). The use of a qualitative approach had merit in the study of sexuality allowing the researcher to deeply explore and understand the true nature of the experience for each individual. Because sexuality was viewed as private and most participants were cautious to disclose, research has been difficult. Qualitative research has the potential to uncover some of the deeper meanings and reasoning behind the experience. The current study, however, proposed a quantitative correlational design to explore the relationship between many of the childhood sexual knowledge acquisition methods and sexual self-esteem. A correlational design helped identify which areas of sexual knowledge acquisition were more closely related to sexual self-esteem, giving rise to more specific areas of research need. The advantages of a quantitative design included a larger data sample, with more objectivity in the findings, the use of statistics to analyze the outcome, and the potential to generalize to a larger population (Cozby & Bates, 2015). The research element that determined which research design to choose was the specified research question itself. Research questions should guide the direction of inquiry and inform the hypotheses (Cozby & Bates, 2015). A quantitative design allowed the researcher to objectively explore a potentially predictive relationship between childhood sexual knowledge acquisition components and the dependent variable, sexual self-esteem.
Background of the Problem

Establishing and maintaining a healthy intimate relationship is a priority for most people (Miller, 2012). Even in the best of circumstances, maintaining an intimate relationship is challenging and presents many obstacles to success. Miller posited that sex and sexuality are important components of success and satisfaction in intimate relationships. Because sex is touted as one of the strongest human drives, its focus permeates our daily existence from the creation of relationships to the development of families. Jean Kilbourne (2014) stated that in advertising, by definition, sex is used to sell everything. Sexual messages are everywhere, and humans are exposed to sex every day through popular media and the advertisement of products (Tartaglia, & Rollero, 2015). With few accurate and trustworthy sources of information about sex and sexuality, how children acquired knowledge about sex became a worthy area of study, specifically with regards to how knowledge acquisition informs intimate adult relationships.

There are many ways in which children acquire knowledge about sex. Unfortunately, children sometimes fall victim to sexual knowledge acquisition components that are not healthy or desirable from any perspective. Research is clear in documenting the damage that comes to many victims of CSA (Drach, Wientzen, & Ricci 2001; Friedrich & Grambsch, 1992; Gray, Pithers, Busconi, & Houchens 1999; Kellogg 2010; Kendall-Tackett, Williams, & Finkelhor, 1991; Noll, Trickett, and Putnam, 2003) often creating adult sexual dysfunction in intimate relationships (Colman & Wisdom, 2004). Undoubtedly, not all victims of CSA experience dysfunctional sexual patterns in their adult relationships. Drach, et al., (2001) reported that those who had experienced CSA may have made up as little as 25% of those who experienced later sexual problems. This suggests that there must have been additional sexual acquisition learning venues that influenced adult sexual relationship functioning in general, and sexual self-esteem, in
particular. Kellogg’s (2010) research postulated that there were numerous external and internal aspects that may have contributed to an individual’s sexual self-esteem such as emotional betrayals. There are plainly many contributing factors related to the development of sexual self-esteem. This study examined the relationship between various childhood sexual knowledge acquisition components and adult sexual self-esteem.

**Statement of the Problem**

Children acquire knowledge about sexuality from their earliest days. Overt and covert attitudes and feelings about sex are transmitted to children, both intentionally and unintentionally, not only from parents or care-givers but from the environment around them (Pluhar, et al., 2006). These attitudes and feelings may have appeared anywhere on a negative to positive continuum and are unavoidably revealed through what we may refer to as micro-expressions (McHugh, 1947; Sue, 2010). There are diverse avenues through which children learn about how their bodies function sexually and how they “should” behave in sexual relationships. Each avenue or method likely produces its own influence on adult sexual self-esteem. Research has shown that some issues related to adult sexuality may have been related to experiences such as: CSA, pornography exposure, media exposure, and problematic parenting skills (Lamb & Plocha, 2014). CSA has maintained the attention of the research community leaving other contributing factors to intimate relationship functioning as peripheral (Drach, et al. 2001).

Children partially create a perception of sexual identity based on how they acquired their knowledge about sex and sexuality (Pluhar, et al., 2006). In this dissertation, knowledge acquisition sources such as parents/guardians, sex education, religion/spirituality, siblings/peers, media, pornography, child sex play and child sexual problematic behaviors along with CSA were
explored with regards to their predictive relationship to sexual self-esteem. This research is intended to explore how sexual acquisition components predict adult sexual self-esteem. Implications of this research extend far beyond understanding the predictive relationship that may exist – the results may inform parent-education, and young-adult relationship education efforts.

**Purpose of the Study**

The purpose of this study was to evaluate the relationship between how participants acquired sexual knowledge during childhood and their current adult sexual self-esteem.

**Significance of the Study**

It is important to understand how child sexual knowledge acquisition is related to adult sexual self-esteem. This knowledge may be helpful to parents in educating their children about sex and sexuality along with the paths to be avoided that may lead to destructive patterns within adult intimate relationships. Even though this study was not directed at a particular view point in relation to the acquisition of sexual knowledge for children, the opposing opinions (i.e. liberal and conservative) have demonstrated a tendency to polarize attitudes about how to best strengthen efforts to teach sexual understanding and promote future adult sexual health. More substantial information can only benefit both sides in the education of such an influential topic for children. For this reason and many others, this study aspired to lead the creation of a collaborative approach to sex education, enabling a more unified education system.

**Primary Research Question(s)**

1. How did adults recall acquiring sexual knowledge as children and, when combined with perceived quality of method, and age, did these methods of knowledge acquisition relate to adult sexual self-esteem?
2. How did early sexual experiences, when combined with perceived quality of the experience and age of experience relate to adult sexual self-esteem?

3. Was there a predictive relationship between how children acquired knowledge about sex, perceived quality of method, age, and adult sexual self-esteem?

4. Was there a predictive relationship between early sexual experiences, perceived quality of experience, age, and adult sexual self-esteem?

Hypotheses

H₁ – An adult’s recollection of their most influential sexual knowledge acquisition method, perceived emotional quality of the sexual knowledge acquisition method (learning about sex), and age of acquisition will account for a statistically significant amount of the variance in adult sexual self-esteem, as measured by the Sexual Self-Esteem Inventory (Zeanah & Schwartz, 1996).

H₁₀ - There will be no statistically significant relationship between sexual knowledge acquisition method, the perceived emotional quality of the sexual knowledge acquisition method (learning about sex), the age of acquisition, and amount of variance in adult sexual self-esteem.

H₂ – An adult’s recollection of their first sexual experience, perceived emotional quality of the experience, and age of the experience will account for a statistically significant amount of the variance in adult sexual self-esteem, as measured by the Sexual Self-Esteem Inventory (Zeanah & Schwartz, 1996).

H₂₀ - There will be no statistically significant relationship between the recollection of the first sexual experience, the perceived emotional quality of the experience, age of experience, and amount of the variance in adult sexual self-esteem.
Definition of Terms

Child Sexual Knowledge Acquisition: For this dissertation, child sexual knowledge acquisition refers to the external ways in which adults recalled learning about sex and their sexuality, including parents/guardians, siblings/peers, religion/spirituality, media/pornography, child sex play, childhood sexual behavior problems, and child sexual abuse/molestation. For the purposes of data collection, this construct has been referred to as “sexual information.”

Child Sex Play: Child exploration and experimentation of their own bodies and interest in others, also included childhood peer age-appropriate sexual interactions (Okami et al. 1997).

Childhood sexual behavior problems: “Sexual behaviors, which were disturbing to others or had a negative consequence for the child” (Horton, 1996, p. 541). In addition, children younger than 12 who introduced behaviors involving sexual body parts (i.e., genitals, anus, buttocks, or breasts, that are developmentally out of place or potentially harmful to themselves or others; Lamb & Plocha 2014; Szanto, Lyons, & Kisel, 2012).

Child sexual abuse: “Child sexual abuse was the involvement of a child in sexual activity that he or she did not fully comprehend, was unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violated the laws or social taboons of society” (World Health Organization, (n.d.), p. 75). Child sexual abuse involved more than this basic definition. It was sexual activity between a child and a person who was either significantly older or in a position of responsibility for such child. These activities included but are not limited to: coercion in any unlawful sexual activity, exploitative use of a children in prostitution, pornographic or any other sexual activities.

Sexual self-esteem: Sexual self-esteem was; “the affective reactions to her/his subjective appraisals of her/his sexual thoughts, feelings and behaviors” (Zeanah and Schwarz, 1996, p. 3).
Adler and Hendrick (1991) attributed higher sexual self-esteem to the concept of self-acceptance, thus contributing to a person’s ability to contemplate and prepare in advance for intimate connections. Dutton and Brown (1997) considered sexual self-esteem to be a reflection of one’s self-view under the purview of sexuality. Sexual self-esteem has been defined more specifically with the use of subscales of the assessment instrument which are; (1) skills/experience, which was the ability to please or be pleased by, and to be available to a partner; (2) attractiveness, the person’s sense of self-attractiveness, regardless of others’ opinions; (3) control of their own thoughts, feelings, and actions; (4) moral judgment – the person’s congruence with moral standards; and (5) adaptiveness – their personal goals and aspirations (Zeanah and Schwarz, 1996).

Limitations

There were a number of limitations related to this study, the first being the somewhat explicit nature of the questions in the survey and questionnaires. These questions were of a personal nature which may have increased the possibility of participant discomfort with full disclosure. Second, the reliability of the answers relied on the integrity of memory recall, which research had shown to be slightly inaccurate (Lamb & Plocha, 2014). Memories may have been somewhat distorted from any number of confounding experiences: passing of time, maturity, or potentially false memories (de Graaf & Rademaker, 2011). The researcher responded by inviting the participants to answer truthfully to the best of their ability. One more related limitation was that the researcher developed the demographic and personal information survey. In response to this limitation, the survey was presented to and amended by three other professionals in the field and a group of students from the University of Montana enrolled in an assessment course.
This research study covered many of the components of child sexual knowledge acquisition, however, it did not claim coverage of all possible avenues where children gain their sexual knowledge.

The final limitation was the use of a convenience (non-random) sampling of students at the University of Montana and Gonzaga University. However, the suggested ratio was 15 participants for each predictor or independent variable (Tabacnick & Fidell, 2007). In this study, there were N = 195 students; and three broad potential predictors in each analysis (knowledge acquisition method, quality, and age); this satisfied sample size requirements for these purposes. An adequate sample size was anticipated for this study.

**Delimitations**

The participants were enrolled in any university undergraduate program of study and were between the ages of 18 and 25. Amato (2011) and Arnett (2000) verified this delimitation suggesting that during the late teens and early twenties, a life stage begins that entailed independence, strategy for life work, education, career, love, and worldview exploration. Adult intimate relationships likely had not yet had a large impact on this age group, therefore, this study relied mostly on childhood and adolescent experiences to inform participants’ responses.

**Summary**

Relationships are paramount to most human beings. For most, establishing and maintaining a healthy intimate relationship is a life goal. There is evidence that healthy sexual self-esteem contributes to satisfying adult intimate relationships (Miller, 2012). There are many ways children learned about sex and sexuality and each of these knowledge acquisition methods may have an influence upon adult sexual self-esteem. The present study investigated the predictive relationship between each of the identified components of sexual knowledge
acquisition and adult sexual self-esteem. In addition, perceived quality of sexual information, perceived quality of the first sexual experience, and the age of learning and first sexual experience have been analyzed to determine if a relationship to sexual self-esteem exists.
Chapter Two – Literature Review

This chapter provides a review of the research regarding each of the child sexual knowledge acquisition components of interest. The effects of these components and their influence on the lives of children and their subsequent adult sexual self-esteem have been considered. This chapter reviews the existing research regarding the positive and negative effects of each of these components on adult sexuality, and the inevitable obstacles that are present when researching children. By looking at the current literature, deficits have been noted showing future research areas of interest. Included in the review of literature is an examination of the variable of sexual self-esteem and its role in this study.

The methods of childhood sexual knowledge acquisition, for the purposes of this review, have been chosen based on how available and prevalent they are in the literature as a means of childhood sexual learning. This review focused minimally on child sexual abuse which has been in the forefront of research for many years. Many of the methods of sexual knowledge acquisition have a strong research base while others appear to have been potentially overlooked or less available for researchers to explore. Discovering the potential influences of each one of these learning methods as they relate to sexual self-esteem has the potential to inform those who educate and protect children during their developmental stages and those who facilitate relationship enhancement and education programs. There is hope that this research will add to the body of knowledge that exists about childhood sexuality development. It will add to the understanding of potential vulnerabilities children face as they establish their sexual identity.

Malin and Saleh (2014) indicated that understanding childhood sexual development is one of the most challenging of all research pursuits, and that the present understanding is insufficient.
The Difficulty of Child Research

In general, conducting research involving children is complex. Restrictions placed on collecting data from children are intended to guard their safety and innocence (Robinson, 2012). Robinson indicated that more studies have been conducted outside of the United States (US) than within due to US restrictions put in place by school systems and parents in attempts to guard their children’s innocence. These restrictions continue today. Okami, et al. (1997) confirmed the difficulty in studying children by reporting that Borneman’s book (Childhood Phases of Maturity, 1994) rests as the very first comprehensive study on sex and childhood, ages newborn to eight, and was produced only 22 years ago.

Most research on children is performed either by questioning adults with regards to their childhood memories or through the observation of children (Haaguard, 1996). Direct observation is a valid technique according to de Graff and Rademaker (2011). The observation of small children is a promising way to research their sexual activities, as children have a difficult time veiling these activities from those who watch over them, such as parents/guardians and teachers (Martin, 2014). Obviously, direct observation, as it relates to childhood sexual knowledge acquisition, also has its limitations – experiences as complex as developing sexuality are not directly observable. Retrospective research – asking adults to recall their experiences as children – represents an incomplete and altered understanding of children’s true feelings, thoughts, and behaviors (de Graaf, & Rademaker, 2011). Researchers assert that retrospective reporting has a bias of its own, contending that reports such as these are subjective in nature, however, they also indicated that this is the best method available in conducting research at this point (Lamb and Plocha 2014; Okami, et al. 1997). The current study relied on adult retrospective recall to learn how participants in this study acquired knowledge about sex and sexuality as children. While adult retrospective recall is not perfect, the purpose of the study is
to understand how participants’ perceptions of their childhood sexual knowledge acquisition were related to current sexual self-esteem. The perceptions are what matters, and not necessarily the objective facts (de Graaf, & Rademakers, 2011).

The following presents a description of each of the potential methods of sexual knowledge acquisition that children might experience, followed by an acknowledgement of the role of early sexual experiences, and finally, the potential relationship that may exist to adult sexual self-esteem.

**Childhood Sexual Knowledge Acquisition Components**

The following section comprises the research gathered on the seven-chosen sexual knowledge acquisition components. Some components are well documented and other are in need of further research.

**Parents/guardians.** The first of the childhood sexual knowledge acquisition components (CSKAC) addressed was learning about sex and sexuality from parents or guardians. Parents were assumed to be the primary educators of their children regarding sex and sexuality (Lamb & Plocha, 2014; Morawska, Walsh, Grabski, & Flecher 2015; Okami et al., 1997; Pluhar, et al., 2006). However, parents were described as possibly not being in possession of accurate information or communication skills to accommodate this task. Morawska explored that many parents were ill-equipped to take on this sensitive challenge of educating their children about sex and sexuality. Morawska, et. al. (2015) explored several reasons for this, including: “parents not feeling confident and lacking knowledge about sexuality; embarrassment about discussing sexuality; fear of planting ideas in children’s heads and destroying their innocence; lack of effective communication skills; and discomfort with their own sexuality” (p. 236). Nevertheless, Lamb and Plocha (2014) reported that parental influence has been heavily researched and was
found to be essential to childhood sexual understanding, but that parents’ approaches, attitudes, and beliefs in teaching their children, were as a culture, still in the developmental stages. The parent/child relationship contributed to the parent’s ability to teach children about this sensitive topic.

From the moment of birth, the way a child is touched, the language that is used to talk about sexuality, parents’ expressions of their sexuality, and the way children’s questions and curiosities are handled all affect a child’s sexual development. Chances are, if parents are uncomfortable dealing with sexual issues, those messages will be passed on to their children (Pluhar et al. 2006, p. 8).

Pluhar et al. (2006) speculated that the quality of the early parent-child relationship influenced the child’s future intimate relationships. They also suggest that, in general, parents raised their children in a pattern similar to their own experience. If parents were raised communicating about sex, they were likely to have these same conversations with their children.

Problems related to parents/guardians communicating sexual material to their children often revolved around their attempts to shield their children from perceived harm and to protect their children’s purity (Dilorio, Pluhar, & Belcher, 2003; Hutchinson and Cederbaum, 2011). In the United States, government and legal institutions have developed regulations to protect the innocence of children (Robertson, 2012). Childhood innocence is an important concept for most parents/guardians and research continues to evaluate the best ways to protect children from losing that innocence. Some of the research stated that children may be too young to understand sexuality, depending on their developmental stage more than a specific age range (Robinson, 2012), however, more data is required to substantiate this finding.
Morawska, et al. (2015), offered an alternative perspective to those parents who fear educating their children about sex too early and damaging their innocence, indicating that there is evidence to the contrary. Parents who developed healthy relationships and can communicate with their children about sensitive topics like sex, have a positive influence on their children’s decisions concerning risky sexual behaviors. These researchers explained that parents have the potential of using books, internet, and other community resources in working with their children and making discussions more comfortable. Despite having many resources at their disposal, parents may continue to find it difficult to initiate sexual conversations, and instead, children use the internet themselves to acquire this information. Morawska, et al., (2015) reported that parents today are realizing their role as sex educators is more important than it was for their parents, encouraging them in their attempts to be more proactive.

Even though common sense indicates that parents are the main tutors of sexual information to their children, mothers are the true disseminators of the majority of information with both boys and girls (Lamb & Plocha, 2014; Pluhar, et al. 2006). Nevertheless, girls generally received more information than boys from their parents. Martin and Luke (2010) reported that there are differences in the way mothers disseminate information to their children based on the sex of the child. Mothers tended to disclose more to their daughters with regards to romance (Martin, 2009), being safe, reproduction, and morality in relationships (Martin, & Luke, 2010). Additionally, mothers from diverse cultural backgrounds talked to daughters about the consequences of sexual activity, highlighting that it was the girl’s responsibility to control sexual activity, while admonishing them to receive higher education.

According to Pluhar, et al., (2006), although some ethnic groups were more open to discussing sexuality than others, topics of sexual information that parents engaged in do not
seem to change regardless of the ethnic group. Discussions with girls tended to be more conversational whereas boys were given direct information (Whalen, Henker, Hollingshead, & Burgess, 1996). Topics of conversation with children usually centered on problematic issues such as sexually transmitted diseases like HIV/AIDS. Condom use was usually discussed with boys while girls were coached about body development, abstinence, and pregnancy (Dilorio et al. 1999; Dilorio et al. 2003). It was also important to note that much of the education around sexuality was targeted toward later adolescents and older children, rather than young children (Morawska, et al., 2015). Bulat, et al., (2016) implied that if children were not receiving sex education in their younger years (specifically before 11) from parents or educational institutions, they may have been hearing information from peers, siblings, and media with a greater likelihood of early sexual relationships. Morawska suggested that this may explain why mothers focused on issues of protection, correcting bad information and faulty attitudes that may have been acquired earlier.

There was ambiguity about the effectiveness of parents as disseminators of sexual information. On the one hand, parents often did not have the proper information and skills to present this crucial material. On the other hand, one researcher suggested that it was more important how the information was disseminated than what information was shared (Lamb & Plocha, 2014). Barone and Wiederman (1997) noted that the women in their study who received more communication from mothers with positive attitudes had more satisfaction in their intimate relationships. Conversely, those women whose parents communicated negative attitudes about sexuality reported experiencing the same negative emotional responses their mothers had. Moore and Davidson (1999) postulated that when parents were the initial and primary source of sexual information, daughters exhibited more positive sexual behaviors and attitudes.
Morawska, et al. (2015) explored the critical level of parenting required to establish a fully functioning adult, including a person’s sexual self-efficacy. They acknowledged that parents might have feared that talking to their children about sexuality may cause problematic behaviors and a loss of childhood innocence. On the contrary, intentional communication produced the opposite effect. The acquisition of caring information reduced risky and harmful behaviors in children (Allen & Brooks, 2012; Bulat, et al., 2016). Morawska, et al., (2015) defined self-efficacy as the ability to be successful at accomplishing the task set forth. This definition related to parenting, suggesting that the higher the parents’ sexual self-efficacy the more effective they were at sharing this information with their children.

In sum, parents were important educators of their children with regards to sexual information. Morawska, et al. (2015) suggested that providing more specific, easily accessible information to parents might help with the seemingly overwhelming task of “the sex talk.” Provided guidance to parents about things such as; age appropriate topics, ways of initiating conversations and finding ways to incorporate sexual conversations into daily life instead of waiting until the moment of crisis could make sex and sexuality a more regular and routine discussion. Another resource that parents may have found helpful was a potential list of health care professionals in the area of sexuality that could provide key information, along with sex education programs that provided sound foundational materials.

**Formal Sex Education – Schools.** In her video presentation *Killing Us Softly 4*, Jean Kilbourne stated that “the United States is the only developed nation in the world that does not teach sex education in schools, and she continued by stating that kids were getting sex education – massive doses of it – they were getting it from the media and popular culture” (Kilbourne, 2014).
Sex education could be a strong and positive sexual knowledge acquisition component for children when conducted at a developmentally and age appropriate level (Bulat, et al., 2016). Sex education in schools appears to have an ongoing struggle that persists with passionate opinions of parents wanting to preserve the innocence of their children. According to Fisher (2015), there were two main barriers for sex education in schools: parents not wanting sex education in schools and teachers’ discomfort teaching sex education. In contrast, another research study indicated that when parents were questioned as to their desire for sex education within the schools, the majority agreed on the importance of sex education (Asekun-Olarinmoye, Dairo, Asekun-Olarinmoye & Adebimpe, 2014). Most parents in the aforementioned study, however, were either too embarrassed to talk to their children about sex themselves or had a fear of what might have been taught within the school system programs. Of the 385 parents involved in a study in Nigeria, 72.9% of the parents approved of having sex education in the school. In the discussion of content, the majority of the parents continued to express interest in having abstinence themes presented while the remaining parents desired comprehensive sex education. It was suggested that all stakeholders, including parents, collaborate on a curriculum so that all could agree upon its content. A collaboration such as this could have ideally resulted in stronger support from the parents to teach sex education in the schools.

Jerves et al. (2014) indicated in their study of Ecuadorian families that cultural views could have had a strong effect on school sex education programing. It was clear that family and cultural values influenced how parents viewed these educational programs. Jerves and colleagues (2014) highlighted the extensive influence that family, peers, and media had on children before they even enrolled in school. These influences had a distinct impact on the sexual development of each child. Jerves et al., (2014) recognized that there were many
religious families that believed devoutly in maintaining virginity until marriage and espouse fidelity in marriage as the most important principles instilled in their children. They continued exploring this issue by stating that some parents may have been lacking an understanding of normal adolescent sexuality development, and perhaps feared the influence that formal sex education would have on the developing minds of their children. DeLamater and Friedrich (2002) suggested that sexual development is a process that begins at birth and ends with death and is subject to an individual’s sexual life style during the different periods of life.

In another study, Fisher (2015) distributed a list of 13 sexual education topics suggested by the United States National Sexuality Health Standards to groups of parents. A total of 57% to 90% of the parents agreed upon the following topics for instruction; bullying prevention, friendship, healthy relationships, proper names for body parts, different kinds of families, and sexual abuse prevention. After receiving feedback on accepted topics, many parents struggled to agree upon when children should receive this information; half believed instruction should begin in 5th grade and the other half preferred starting between 6th and 8th grades. Agreeing on the topics of concern and the age at which to begin this education was only part of the struggle.

Baker, Smith, and Stoss (2015) contended that the war on sex education and policy, at least within each state, was grounded between two groups, theists and secularists. Interestingly, because all the states claimed a high theist population overall, Baker et al., (2015) reported this battle for sexual education was presented as the religious traditionalist against the progressive secularists. Every state in the nation reported a theistic population of at least 86%. This would have intuitively spoken to a united belief of traditionalist or religious foundation for the entire country, however, the ways in which these religious populations interpreted these traditional values varied greatly. Baker et al. (2015) illustrated this fact by contrasting the 86% theistic
culture of Connecticut and how they conducted their policy positioning, to that of the more conservative 99% theistic culture of Mississippi. It did not appear to be a large divide as far as theistic population, nevertheless, this spoke to the reality that there were many religious belief systems and they did not all conform to the same stringent moral guidelines or structures as each other. Unfortunately, sex education appeared to be a politically profitable debate in many cases forecast by the climate of the state. If the state had a strong religious political platform, opportunists on that side seized advantage of those conditions and if the state maintained a public health-minded political stance, that side grabbed the upper hand. These actions on both sides left the children at the mercy of the political climate of each state as far as sex education was concerned.

In the U.S., Brough, (2008) explained that state legislation allowed for sex education in public schools granting parents the option to have their children excused from attending these programs. Parents were contacted and given an option of signing a waiver or “opt-out” provision without reprisals on their children. Brough pointed out that allowing parents to opt-out was endangering the health of the children and offering this opt-out option was not a constitutional necessity. Because of legal actions taken by parents for a number of reasons, states had consented to an opt-out program. Brough (2008) suggested that parents receive the information taught in schools, be encouraged to teach their children at home before opting-out, and that there needed to be stricter parent provisions to teach health and sexuality to all children. As noted earlier, some believe that children who received abstinence-only education were less likely to participate in risky sexual behaviors and others believe that those who were not receiving sex education were the ones in danger of getting pregnant and contracting sexually transmitted diseases. This represented the difficulty in creating a program for all children and their families.
Creating a program that works for all is no easy task. Asekun-Olarinmoye et al. (2014) suggested that there are typically two approaches to sex education programs in schools: Safe sex education and abstinence-only education. However, an alternative was proposed that extended the boundaries of both approaches called: comprehensive sexual education and/or abstinence plus. This curriculum was designed to teach a strong abstinence message while educating students in contraception (Asekun-Olarinmoye, et al. 2014). This way, both sides were represented and children received sex education which aids in children’s understanding of core principles of sexuality and how to handle issues as they developed. Nevertheless, this approach continue to face rejection by those who felt their children would be indoctrinated in a contradictory manner related to family values.

For schools in the United States, there is a program already prepared that can be implemented easily with the proper teaching staff. The National Education Association (NEA), along with several other health conscious organizations, came together in 1995 (with an updated version in 2007) and compiled the National Sexual Health Standards for sex education in schools. These standards have been organized into topics (anatomy/physiology, puberty and adolescent development, identity, pregnancy and reproduction, sexually transmitted diseases, healthy relationships and personal safety) and key indicators (core concepts, analyzing influences, assessing information, interpersonal communication, decision-making, goal setting, self-management, and advocacy) that were also divided by age appropriate information, grades two, five, eight, and 12. This information had been configured into an easy-to-understand chart, with suggestions of what could appropriately be taught at each age level (Future of Sexual Education Institute, 2012). This crucial information is available to anyone and may be the perfect companion for parents investigating potential strategies to work at home with their
children. Along with a school sex education program and supportive parents, children also have community-based programs offering further support. As commonsense ascribes, not all community-based programs are as beneficial as others, however, many families belong to religious communities that may continue to serve as sources of information for children as well.

**Religiosity/Spirituality.** Religiosity is typically an environmental situation infused into the family culture (Landor et al., 2011). Religious teachings have been a typical source of sexual knowledge acquisition for children and adults alike, influencing their sexual decision-making process. Manlove (2006) suggested that parents who were more religious influenced their children’s personal decisions advocating for postponing sexual experiences until later in life. Landor et al. (2011) contradicted existing research that suggested that religion has a negative effect on condom use, placing religious youth at greater risk of sexually transmitted diseases. Landor et al. (2011) studied 612 adolescents and their primary caregivers, 89% of whom reported incorporating religious beliefs and practices into their day-to-day lives. Participants in this study were African American families from towns in Iowa and Georgia living in neighborhoods where 10% of families were living below the poverty level. Their research indicated that religious affiliation and culture helped protect youth by developing their decision-making processes early. Further, authoritative parenting styles and being surrounded by peers who were not sexually active served as protective factors against early and unprotected sexual activity. Landor et al. (2011) purported that “early sexual activity and unprotected sexual behavior led to negative physical and psychological outcomes” (p. 296). A more religious view advised that casual sex had the power to alter lives and families through sexual diseases, divorce, single parenthood, and mental distress (Leeker & Carlozzi, 2014; Lamb & Plocha, 2014).
Griffee et al., (2014), however, suggested that strict religious teachings were the etiology of sexual repression, maladaptive child sexual experiences, and adult sexual dysfunction. These researchers theorized that there was a “critical-period of learning” based on a study performed on rhesus macaque monkeys who were kept from heterosexual play with other monkeys during early development. These monkeys were then unable to mate as adults. Griffee et al. (2014) suggested that individuals who were deprived of sexual experiences by age 13 were less likely or “would never be able to fully catch up” (p. 296) with the abilities of those who learned from these experiences during that critical period of learning.

Interestingly, both sides seemed to be voicing similar opinions about what religion teaches; modesty, strict moral values, and sexual relations within marriage, for example. Both the religious and secular sides agreed that children living these values would have fewer early sexual experiences. The disagreement appeared to be in the interpretation of these stringent restrictions. Griffee et al. (2014) suggested that these restrictions were harmful to the overall sexual development of children, while Landor et al. (2011) purported that those early experiences were harmful to the future well-being of children as adults. It is possible that there is a balanced view regarding the appropriate amount of sexual information a child is exposed to, in combination with a strong moral code and value system, irrespective of religion.

Landor et al. (2011) suggested that parents who became part of an organization in their communities such as a religious group, were providing increased support for children’s safe sex practices. The research also generally suggested that religious-minded parents demonstrated warm, loving, and involved relationships with their children, utilizing “authoritative parenting practices” (p. 299). This research encouraged parents, community, and religious organizations of
the importance related to their children’s peer and group culture, allowing for informational transparency leading to intentional teaching moments.

Religious groups, in general, were intimated to be less promiscuous than their non-religious counterparts. This was not always the case. Burdette, Hill, and Myers (2015) explored various religions’ perspectives and their stringency with regards to sexuality, finding that some of these groups were more sexually liberal than others. Thus, not all religions aspired to the same moral (specifically sexual) standard (Burdette et al, 2015). The research indicated that those who were actively attending services within more conservative religions tended to have fewer sexual experiences, have them later in life, and delay engaging in intercourse until marriage (Landor et al., 2011). From this perspective, these restrictions acted as a safe-guard supporting sexual wellness in the future.

Griffie et al. (2014) contended that participating in masturbation and early partner sex experiences before the age of 13 would bring about the highest interest in adult sexual frequency, possibly because of the growth of the brain during this critical developmental time-period. Families with higher levels of communication and nudity allowed in the home engaged in more sexual behaviors than those of conservative families. Griffie et al. (2014) reported that religion has the third largest effect on masturbation frequency in adults and the largest effect on frequency of adult partner sex. They suggested that prevention of masturbation activities as children create “regrettable and previously unrecognized unintended consequences” (p. 309) in both men and women. They charged the abstinence movement lead by Christian groups as being another strong negative influence during this critical learning period, reducing healthy sexual functioning in adults. The conflict between these opposing views was characterized and denoted in the research.
Allen and Brooks (2012) indicated that sexuality and religion were often deemed to be at odds in our western culture. They too suggested that religious intervention had a high degree of influence on children’s decision-making when it came to sexual activities and the timing of such activities, especially when the families of origin were devout in their observation of religious teachings. Allen and Brooks (2012) believed that religious instruction often had the ability to deter children from making risky sexual decisions until later in life and supplied them with a strong support system. However, families and religious institutions are struggling to keep up with the amount of sexual information that is becoming part of lives of children at a pace that parents have found almost impossible to manage. Children also receive contradictory information between their secular and religious educations creating cognitive dissonance and confusion over how to respond in today’s world (Allen & Brooks, 2012). This evidence provided even more support to the claim that open and honest communication about sex in families serves as a potentially mediating factor in both religious and non-religious cultures.

**Siblings.** Siblings are the longest-lasting, and potentially most influential relationship in children’s lives (Almy et al., 2015). Almy, et al. (2015) reported that more children grow up with siblings in a home than with a father. The extent that siblings influenced each other was related to age difference and the quality of the sibling relationship (e.g. siblings close in age and reporting a positive relationship have greater influence on each other than siblings who were far apart in age and reported negative relationships), along with potential for substance abuse and risky sexual activity (Almy et al., 2015). However, Almy et al., (2015) purported that the amount of influence siblings have on each other with regards to sexuality development, in comparison to that of parents and peers, is unknown.
Much of the research that had been conducted on siblings references social learning theory (SLT; Bandura, 1977) as a foundation, suggesting that siblings tended to imitate those who offer warmth, status, and similarity to themselves (Almy, et al., 2015; McHale, Bissel, & Kim, 2009). From this perspective, younger siblings were more often shaped than older siblings through these relationships. Other traits that were influenced through SLT and age discrepancy were gender and genetic similarity. These modeled and genetic influences had effects on the sexual attitudes of younger siblings when the sibling relationships were warm. Children who perceived their older siblings as demonstrating risky sexual behaviors were much more likely to follow their examples (Almy et al., 2015).

Almy et al., (2015) examined perceptions of younger siblings’ attitudes towards sex and sexual behaviors when they believed that an older sibling were sexually active. They found that believing a sibling was sexually active was just as powerful as if the sibling had directly admitted sexual activity or abstinence. This belief was associated with increased activity and a positive attitude toward sexual behavior regardless of the accuracy.

Knowing that siblings are important role models for their younger siblings, it seems intuitive that sibling interventions would be a positive aim for targeted at-risk youth programing. Siblings who demonstrate positive attitudes toward safe sex and abstinence could serve as a protective factor for early sexual activity in younger children. (Almy et al., 2015; McHale et al., 2009). McHale et al., (2009) reported that siblings could be strong intervention influences. For example, a sibling who has been through a difficult time might desire to help an at-risk sibling. When a sibling develops a warm relationship with another sibling, the influence that the older sibling has can be powerful, especially if a solid parental relationship is not available. Unfortunately, the opposite could also be true, and actions of a sibling could direct a younger
sibling, intentionally or unintentionally, towards harm. Even non-coercive child-to-child sexual behaviors can potentially contribute to the development of child sexual behavior problems (Haugaard, 1996), even within sibling relationships.

Research clearly acknowledges that children’s environments play an important role in their social and personal development, which includes sexual development (Bulat et al., 2016; Lamb & Plocha, 2014; McHale et al., 2009). Parents normally played the largest role in this sexual development, with siblings and sex education as close followers. During the younger years, familial, spiritual, and sibling cultures tended to lead the direction toward sexual understanding and perceptions (Bulat et al., 2016). Bulat, et al., (2016) counseled that during late childhood and into adolescence, a more external force may begin to take hold of this sexual development if understanding was already been firmly established – that of peer relationships. Information obtained through peer relationships has the potential to support or override sources of sexual knowledge acquisition that were not adequately directed or too late in their delivery.

**Peers.** Bulat, et al., (2016) contended that in North America, peers, just as siblings, had great influence on when early sexual experiences began or if they were postponed until later. Peers mediated the connections between the family culture and initiation of sexual activities. Findings were inconsistent with regards to peers as conduits of sexual knowledge, in part, because of the lack of research conducted on peer sexual contact. Bulat, et al., (2016) state that sexuality was not simply a child’s characteristics but influenced by a complicated mix of family, peers, and school. Lamb and Plocha (2014) suggested that a study might be warranted on the interaction between peers, the types of sexual activities perpetuated in these relationships, and the environments from which they originated. These findings corroborated those of Haugaard (1996) reporting that adult perpetrators revealed a propensity for coercive sexual behavior with
peers during childhood and through adolescence. Many of these adolescents reported initiating coerced behaviors of a sexual nature with other children. Haugaard (1996) implied further that child-to-child sexual behaviors may have led to abusive behaviors in adolescence and adulthood.

Because self-report from adults confirms that peers had a strong influence on children’s sexual attitudes and development, the parent-child relationship and communication atmosphere is crucial even in relation to children’s friend choices. Peer relationships shape behavioral norms, attitudes, and experiences, specifically sexual roles, and self-concept, which have potential to guide sexual behavior (Bulat, et al., 2016). Further, peer relationships may lead to congruence with family values or diverge in paths unintended and unforeseen such as experimentation and pressure to participate in sex before one was ready. The influence of peers in children’s lives begins at an early age (usually between 3 and 5), and extends into adulthood.

Researchers have reported children of both genders typically touching their genitals between the ages of two and nine (Friedrich, Grambsch, Broughton, Kuper, & Beilke, 1991; Friedrich, Fisher, Broughton, Houston, and Shafran, 1998). Money and Ehrhardt (1972) postulated that between the ages of five and eight, children became interested and attentive to their privacy making observation of sexual activity much more difficult. Friedrich et al. (1998) proposed that children began to show specific interest in touching themselves and wanting to watch others undress. These activities also included the use of sexual language, viewing naked pictures, and kissing outside of the family. Pluhar, et al., (2006) indicated that children from ages seven to 12 were more likely to have sexual experiences during this time with someone of the same sex and then demonstrate interest in the opposite sex as later sexual attraction emerged.

In a study conducted by Pluhar, Dilorio, Jennings, and Pines (2005), children six to 12 years old were asked directly about the types of play they participated in with each other. The
researchers hypothesized that the children’s answers may not have been any more accurate than acquiring them from another resource because of the embarrassment surrounding sex play. However, 17% of these children admitted to hugging and kissing, another group of 11-12-year old’s indicated that 10% had “made out” and six percent had touched a boy’s genitals and five percent had touched a girl’s genitals.

Peer sexual play appeared to be one of the least researched topics offering little information about child sexual behaviors (Haugaard 1996), and apparently, no established relationship to adult relationship functioning. Okami et al.’s (1997) findings supported prior research, encountering no connection between childhood peer sexual experiences and adult maladjustment, opposing the characterization of peer sexual experiences as “pernicious influences” (Lamb & Plocha, 2014, p. 354). The sexual knowledge acquisition method may not have been the determining factor of whether the sexual learning or experienced event was positive or negative, rather it may have been the environment surrounding the experience itself that created the expressed outcome. The environment may have been represented by any number of emotional, physical, or behavioral circumstances. Chaffin et al., (2008) concluded that it was important to look at the environment in which the sexual experiences occurred, not only in terms of with whom, but whether the event was experienced by force or as some type of sex play. In other words, the perception of the experience could have come from the sexual learning component or realized through the quality of the experience during the event.

Lamb and Coakley (1993) conducted a survey with women undergraduates showing that 85% of these women recalled having some kind of child sexual experience. About 38% of them experienced touching others’ genitals either with or without cloths and a smaller number, 4%, reported participating in oral sex, noting that the average age of these experiences was reported
as seven and a half years old. Lamb and Coakley (1993) were not only interested in what children were doing and possibly how often they were doing it but if these events created problems in adult relationship. Haugaard and Tilly (1988) reported that from their research, the environment of the experience was more important than whom it was with. If the experience was a coercive event, the outcome was less positive. It was important to recognize that these studies were conducted on undergraduate women and that men might have experienced childhood sexual experiences differently.

Lamb and Plocha (2014) investigated typical ways that boys function as they acquired knowledge about their sexuality, additionally acknowledging that there was less research on boys’ sexual experiences and development than girls’. Cohan (2009) presented an interesting finding, which he described as “conquest”- some sexual accomplishment that was brought back to the group and bragged about. Forrest (2010) described the responses of boys in a British study, revealing that it was common among boys to ask about physical types of things such as sexual positions and penis size. Another study performed by Reynold (2007) indicated that young boys showed their masculinity by being public about their relationships and using harassment and sexual language to demonstrate power. Few studies have been conducted with boys, indicating a need for further research on male sexuality during childhood. The research that does exist recognized the vast differences in the ways boys and girls were socialized to understand their gender and sexuality.

Further research suggests that sexual experiences often begin in early childhood. Haugaard’s (1996) study revealed that out of 600 undergraduates, 38% recalled having a sexual encounter before the age of seven, 39% had a sexual encounter between the ages of seven and 10, and 35% between the ages of 11 and 12. He later conducted another research study of 1000
undergraduates, which indicated that 42% of these students experienced a sexual occurrence between the ages of seven and 12, including sexualized hugging and kissing. Haugaard (1996) suggested that sex play had two sides, one that was normal child’s play and the other that was dangerous, allowing for sexual perpetration. There appeared to be a gap in the research as to where child’s play stopped and sexual problematic behaviors began. This gap minimized the effects of what some researchers considered to be the harmful effects of peer sexual interplay (Johnson, 1988). Lamb and Plocha (2014) agreed that a minimal amount of research had been conducted on sexuality between peers and siblings and its effects on children’s sexual development. This research gap solicited the question of the true relationship between peer sexual interactions and sexual self-esteem in adulthood. It seems intuitive that peers may share information gleaned from the media, potentially leading to misunderstanding and exposure to glamorized risky sexual behaviors.

**Media.** Kilbourne (2014) reported that children receive massive doses of sex education through the media and pop culture. The sexualization of little girls in photo shoots normalizes very dangerous attitudes about them such as female objectification, unrealistic thinness, and perceptions of unattainable beauty. The American Psychological Association (APA) Task Force’s “Report on the Sexualization of Girls” (APA, 2007) recently targeted the media as part of their research, investigating its influence on the development of children’s sexuality. They postulated that the media’s main propaganda message was intended to sexualize young girls leading them to participate in “raunch culture, pornographication, and striptease cultures” (Levy, 2005a, quoted by Lamb & Plocha, 2014, p. 426). Melrose, (2014) acknowledged that there was no clear, agreed-upon definition of sexualization, however, reiterated the definition used by the APA Task Force (2007). In short, they indicated that sexualization was determining one’s worth
by how sexual they appeared or behaved – a person was held to a narrow standard of attractiveness for being sexy, and was used as a tool for someone’s pleasure and not as a person.

Little girls were enticed with glamorized and sexualized adult experiences through revealing clothing, make-up, photo shoots, and television and magazine portrayals. Toddlers in pageants have been encouraged to “flirt with the audience and portray adult sexual poses” (Lamb & Plocha, 2014, p.426). The illusion of image and perfection was a driving force in this overt sexualization of girls and women all over the world (Melrose, 2014). Lamb and Plocha (2014) acknowledged that the obstacles preventing research with children make it difficult to discern the impact of sexualized media exposure on young girls’ internal schemas. It is ironic that media and popular culture support young girls engaging in sexualized behavior, yet are so protective of understanding the impact of such experiences. Even the most basic of children’s media has been created to influence young minds.

Disney films have even been shown to negatively affect young girls’ (ages five to seven) body image (Asawarachan, 2013) by suggesting that perfect body type and being saved by a prince and living happily ever after are valid expectations. This type of media potentially has had more influence on young girls than parents, schools, and religious organizations (Asawarachan, 2013). Children’s movies emphasized and idealized what is beautiful and acceptable and what is not. Negative messages need not be overtly sexual to influence children’s cognitive patterns (Asawarachan, 2013). Jean Kilbourne reported that marketers have begun advertising to children as young as six months old, realizing that even babies recognize business logos. “Nowhere is sex more trivialized than in pornography, media and advertising” (Kilbourne, 2014).
Firestone et al., (2006) intimated that the combination of sensualization, trivialization, and portrayal of sexual violence in the media desensitized consumers, leaving them lacking in judgment about appearance and reality. This misdirected information leaves youth with unrealistic and inaccurate assumptions about their personal sexuality and the truth about normal relationships. Youth have the potential to be exposed to 14,000 sexual references a year and very few of those messages encountered represent safety and responsibility within sexual relationships (Firestone et al. 2006).

Firestone et al., (2006) suggested that not all media has a negative connotation. There are websites, television programs, and advertising messages that project positive and uplifting messages. An individual’s sexuality is developed through several factors such as biological, physiological, and social components which then can have a long-term effect on sexual self-esteem in later adult relationships. An additional element of media exposure that has potential to shape a young person’s perception of sex and sexuality in profound ways is pornography.

**Pornography.** Pornography and media go hand-in-hand; the momentum of each strengthens the other. Wright (2014) explored the challenging effects of pornography, especially in the lives of children. Statistics showed that growing numbers of children around the world were exposed to pornography (Johnston, 2013; Wright, 2014). These statistics indicated that 42% of children in the U.S. between the ages of 10 and 17 are exposed to pornography. In countries such as Sweden, a study exposed that up to 90% of Junior High boys and 60% of girls admitted that they had watched pornographic movies.

Wright (2014) continued exploring the worldwide epidemic which glamorizes, degrades, and exploits sexuality and intimate relationships. For example, it was reported that only 2% of all pornographic videos portrayed the use of protective condoms in their sex scenes. Parents,
schools, and communities are working to promote safe sex and responsibility while the media romanticizes risky behavior and ignores societal consequences. The research indicated that pornography was rivaling parents in educating young children simply because technology had made it so accessible. The media has taught sexual promiscuity, the objectification of women, and modeled aggressive behaviors as normal in intimate relationships (Kilbourne, 2014). Jean Kilbourne (2014) continued to explain that violence and abuse were the chilling but logical result of this kind of objectification, and that the commonplace objectification of women in media was truly damaging.

While research suggested that the age for viewing pornography has lowered for the last 20 years, recent research suggested that the viewing age appears to have stabilized (Johnston, 2013). Children were exposed to pornography (viewing naked photos) beginning around the age of 10. Watching pornography at this young age drove the increases in pornography use in adolescents ages 14 and older. Johnston (2013) also suggested that the negative consequences of viewing pornography for children at this young age outweigh the possible positive effects that might be present. It was evident that the availability of sexually-laden media and pornography may have had significant effects on the sexual development of young children and adolescents. It was unclear, to date, how significant the influence of these factors are.

Rasmussen, Ortiz, and White (2015) purported that boys watched more pornography than girls and that parents did not speak to boys about this pornography use any more than they did girls. These researchers suggested that parents may not have been aware of how much pornography may have affected their children, however, it was shown that mediation of children’s use of pornography had a negative relationship with adult use of pornography – the more parents intervened, the less children would view pornography as adults. This should have
encouraged parents to talk to their children about the use of pornography knowing that they may have influence on their children’s pornography use in the future.

The above research has shown that children are influenced by a number of sexual acquisition components that potentially have both positive and negative effects on their understanding and expression of sexuality. Depending on the outcome of those effects, children form attitudes, feelings, and behaviors toward their personal expression of sexuality or sexual self-esteem. However, these are not the only ways in which children develop sexually. There are childhood experiences that may also influence the formation of sexual self-esteem such as; child sex play, child sex abuse, molestation and finally childhood sexual behavior problems that manifest because of negative outcomes from these childhood experiences.

Early Childhood Experiences

Childhood experiences refer to those experiences that are considered normal and natural such as child sex play and those experiences that have been forced upon children not by their choice or expectation such as child sexual behavior problems, molestation, and child sex abuse. These types of sexual knowledge acquisition have been explored and researched to a much greater extent and were mentioned here to acknowledge their influence in relationship to effects on sexual self-esteem. However, they are not the focus of the research project.

Child Sex Play. Child sex play is referred to as, “Childhood peer sexual interactions usually referred to as sex play or sexual rehearsal” (Okami et al. 1997, p. 340). Sex play in children did not possess the same characteristics or drive that existed in adult sexual relations, nevertheless, this type of play has continued to be considered sexual even though it was different from adult sexuality. Childhood sexual play is considered an essential part of childhood development. However, Okami et al. (1997) warned that childhood sexual play may have a dark
side and need monitoring. They cautioned that this type of interaction could lead to sexual abuse disguised as play and provide an avenue where perpetrators may act out on victims. On the other hand, if children were not allowed to participate in sexual play, some say, this could have the potential to create pathology in adulthood. Complicating the issue of normal sex play was that it may affect all people differently in relationship to adult functioning. Okami et al. (1997) implied that previously assumed damaging events were shown to have a range of diverse effects upon the child victim as they became an adult. Variables within the child’s background such as ethnicity, culture, duration of events, severity of behaviors, as well as possible force or coercion may have altered the long-term consequences (Okami et al., 1997).

Lamb (2002) stated that childhood play and possibly post-childhood experiences could have misdirected children as they become adults, leading them to interpret innocent behavior as abusive sexual experiences. The opposite may have also occurred – some of their harmful and abusive experiences may have turned into positive memories as a way of coping with the trauma. Lamb and Plocha (2014) concluded that even with qualitative questioning, these regurgitated memories may still be flawed by a distorted lens within the self-conceptualization of that experience (de Graaf & Rademakers, 2011), however, it seems that the actual feeling and effect of the recall moment matters more than the event itself. Okami et al. (1997) also questioned retrospective recall explaining that family structure had a great deal to do with how memories were retrieved. For example, if the family culture was more traditional or non-traditional, the outcomes of memory retrieval may easily conform to the family belief system. Okami et al. (1997) explored the hypothesis that children coming from less traditional families would experience less anxiety-provoking emotions around their sex play than those coming from conservative or more traditional families. It was found that the structure of family values had
significance, suggesting that if a family was liberal in their expression of sexuality in the home, the children maintained a more liberal perspective in their adult sexuality. Despite the differences in perception associated with childhood sex play, there clearly was a point at which sex play became problematic, and potentially damaging.

**Childhood Sexual Behavioral Problems.** In establishing a baseline between normal childhood sex play and what researchers referred to as childhood sexual behavior problems, definitions were found to verify meaning on this childhood issue. Horton (1996) defined sexual behavior problems as “sexual behaviors, which are disturbing to others or have a negative consequence for the child” (p. 541). Other authors acknowledged sexual behavior problems, also calling them sexually problematic behaviors (Lamb and Plocha 2014; Szanto et al., 2012) which Chaffin defined as, “Children ages 12 and younger that initiate behaviors involving sexual body parts i.e. genitals, anus, buttocks, or breasts, that are developmentally inappropriate or potentially harmful to themselves or others” (Chaffin et al. 2008, p. 200). Other environmental experiences such as adult violence, parents openly discussing personal sexual problems, exposure to intercourse in movies or in vivo, and media, including pornography were reported as influential on childhood sexual behavior problems (Johnson, 2006). Children who have experienced these interactions, including the above-mentioned experiences, may have been victims of unintentional neglect and abuse. These childhood experiences may have initiated negative sexual attitudes and feelings leading to negative adult sexual self-esteem.

Szanto et al., (2012) identified several age-appropriate sexual behaviors in children 12 years of age and younger. These behaviors included “self-stimulation, self-exposure, watching others undress, placing oneself close to others, sexual play with friends and siblings, and
curiousness of sexual content in media” (p. 232). These activities were observed frequently in younger children and were often done openly.

When children begin engaging in activities such as child sex play or child sexual behavior problems, Carpentier, Silovsky, and Chaffin (2006) cautioned that these children should not be labeled sex offenders in the same way as adults. Most are not sex offenders and most will not become such. There are other indicators that may lead to childhood sexual problems such as: poor parenting, conduct disorders, maltreatment, exposure to sex within a sexual environment, violence, and especially family violence (Friedrich, Davies, Feher, & Wright, 2003; Johnson, 2006). This is a short list of issues related to childhood sexual behavioral problems. Johnson (2006) emphasized that the most telling factor related to childhood sexual problems was the environment in which they lived. Environmental influences interacted with the child’s experiences and patterns contributing to adult sexual attitudes.

Haugaard (1996) questioned social workers and doctoral psychotherapists about their opinions as to which actions were child sex play and which were not. Professionals were asked to consider two ages: four-year old’s and eight-year old’s. Most professionals agreed that the majority of sexual actions between four-year old’s were acceptable, except for touching each other’s genitals. When considering the eight-year old’s, 40% of the female professionals said that showing each other their genitals was okay and only 25% of the males agreed. In the case of touching genitals, 16% of the female professionals reported that this was appropriate and only 6% of the males voted in the affirmative. Professional men and women were not in agreement on the potential outcomes sex play may have on the mental health of children. Johnson (2006) indicated that the difference in a positive or negative response to a sexual experience can be
identified through curious or coercive play, while also remaining attuned to environmental factors, specifically family culture and family boundaries.

Lamb and Plocha (2014) recognized that many researchers have disagreed on children’s sexuality and how it manifests throughout the important toddler and preteen years. Were children sexual until four or five and then less sexual until puberty or were they blameless and develop gradually until puberty? Sexuality may have been awakened in their lives through experiences such as negative family environment, peers, or something as devastating as childhood sex abuse (Johnson, 2006). Lamb and Plocha (2014) called for continued research suggesting that child sexuality is an ongoing topic of concern. Regardless of how children developed sexually, research is clear that certain experiences in childhood have a profoundly negative influence on the sexual functioning of adults, specifically child sexual abuse (Kendall-Tackett, et al., 1991).

**Childhood Sexual Abuse.** The purpose of this study was not to emphasize the harmful effects of CSA as one of the sexual knowledge acquisition methods investigated because of previous recognized research. However, it simply acknowledged that prior research has clearly established the impact that CSA has on children and adult relationship functioning. Colman and Wisdom (2004) indicated that some of the social effects of CSA on children were decreased popularity, more conflict with peers, and lower intimacy in friendships potentially leading to sexual behavior problems.

The APA Handbook of Sexuality and Psychology explored sexual abuse as one of the main predictors of Child Sexual Behavioral Problems (CSBP; APA, 2007) including risky sexual behavior, multiple partners, and sexually transmitted disease (Testa, VanZile-Tamsen & Livingston, 2005). There were varying statistics in the reporting of children presenting with
CSBP. For example, Kendall-Tackett, et al. (1991) reported that 34% of sexually abused children acted out with CSBP. Then Gray, et al. (1999) reported a much greater percentage of abused children with CSBP closer to 95%. An earlier study by Friedrich and Grambsch (1992) compared a larger group of children, some of whom had been abused and others who had not. They found that those who were victimized were much more likely to act out upon other children. However, theses authors did not include the number of children that presented with CSBP who were not victims of sexual abuse. Drach et al. (2001) studied a group of children and found that only 25% of sexually abused children externalized with CSBP. Kellogg (2010) suggested that the contributing factors leading to CSBP were experiencing penetration, abuse enacted by family, and being harmed at a young age. Nevertheless, problems related to CSA do not always manifest themselves immediately (Noll et al., 2003).

Noll et al. (2003) examined three distorted behaviors of childhood sexual abuse: sexual preoccupation, sexual aversion, and sexual ambivalence. The child that presented with sexual preoccupation typically was more disturbed, however, predominately presented as asymptomatic after the abuse. This person often had one perpetrator (not the father), short duration of abuse, and little violence. Noll et al. (2003) called this victim the sleeper, meaning that sexual difficulties did not manifest until they became more sexually mature. The other predicting factor in preoccupation behavior was that these children were usually perpetrated against later in their childhood.

The second distortion, sexual aversion, presented with negative memories associated with arousal. These children potentially experienced sexual dysfunction, inappropriate public sexual displays, and additional shame. The compounding effects of both being abused and then later acting out in public, internalized the shame and guilt.
The final distortion, sexual ambivalence, was a combination of preoccupation and aversion. This distortion may have lain dormant and then eventually manifested as sexual arousal in a way that caused the individual to feel re-victimized. Often, someone they trusted who normally would have desired the best for that child was the abuser, having a dissociative effect on the child. There is often blame projected at the offender and the possibility of condemning all members of the offending gender group. It was safe to conclude, “that no sexual abuse should be considered to be mild” (Noll et al., 2003, p. 584).

CSA may have lasting consequences as demonstrated by the above distortions. However, the previous research has shown that not all who were abused as children suffer the same traumatic outcomes (Drach et al. 2001). Drach reported that those who encountered childhood sexual behavior problems or even those who experienced unsolicited or even solicited sexual episodes through child sex play may suffer from similar types of distortions depending on external or internal confounding variables. These outcomes potentially relate to problematic adult sexual functioning and affect adult sexual self-esteem.

**Impact of Child Sexual Abuse on Adult Intimate Relationships.** There is an abundance of research connecting adult relationship dysfunction to child sexual abuse (CSA) (Berthelot, Godbout, Hebert, & Bergneron, 2014; Colman & Wisdom, 2004; Friesen, Woodward, Horwood, & Fergusson, 2010; Johnson, 1988; Noll, et al. 2003; Testa, VanZile, & Livingston, 2005). Colman and Wisdom (2004) proposed that children who were abused and neglected continue to have sexual and intimacy problems into adulthood. The majority of research that has been conducted on the impact of unwanted sexual experiences on adult relationships and sexual self-efficacy has centered on women. This is not surprising since historically, girls and women have been the predominant targets for exploitation and sexual abuse. Testa, et al., (2005) explained in
their research that over a third of the women they surveyed reported unwanted advances before the age of 14. Half of those were unwanted touching and the other half, intercourse. They then examined the possibility that these women had experienced numerous high risk relationships, greater threats of sexually transmitted illnesses (STIs), sexual aggression, and less responsibility with the use of condoms (Lamoureux et al., 2012). All of these areas of relationship experiences are significantly related to experiencing CSA. Lamoureux and colleagues posited that women who experienced CSA have a tendency to become emotionally distraught, and experience feelings of unworthiness in healthy, loving adult relationships.

All relationships influence people’s experiences and shape their attitudes, behaviors, and feelings about the world around them. Bandura (1977) explained that learning is acquired through observation and modeling. People also learn how to respond to their environment and others through patterns presented naturally in the home environment and with peers. Sexual and physical abuse along with neglect have taught patterns of fear, distrust, and isolation which may then mature into the development of negative adult intimate relationships (Colman & Wisdom, 2004).

Testa et al. (2005) indicated that women who experience difficulties maintaining relationships often have numerous sexual partners and are lacking in emotional connection and satisfaction. One of the consequences of childhood sexual abuse is that children learned that by being sexual, they could acquire the attention they are missing. This became one of the patterns that continued into adulthood creating the fallacy that it would create a healthy and sustaining relationship. Testa et. al. (2005) suggested that women who survive CSA are often betrayed by those who are supposed to protect and advocate for them. For this reason, these women show a propensity to associate with men who are more violent and sexually risky.
Colman and Wisdom (2004) discussed the propensity for both males and females to experience difficulties related to creating and developing adult intimate relationships after childhood abuse and neglect. However, evidence has shown that men and women experience the impact of these traumatic circumstances at different levels. Women who have experienced abuse appear to be more likely to choose cohabitation for a time (less commitment) and are more willing to leave a relationship or get divorced than men. Women also reported more dissatisfaction in their relationships. Both men and women were affected in their ability to function but maintained their relationships in different ways. In this same vein, Colman and Wisdom (2004) suggested that abused men claim to have more “warmth, supportiveness and communication” in their current relationships than women (p. 1140). A noteworthy qualifier is that even with a history of victimization, it was not expected that all those who experienced childhood abuse and neglect would show relationship dysfunction and distress (Colman & Wisdom, 2004).

The effects of CSA can be devastating to the self-worth of the individual. Lamoureux et al. (2012) elaborated on the concept of resilience and the impact this has on people’s ability to overcome the effects of CSA. Their research explored the loss of resilience, which includes self-esteem and satisfaction. When these components are missing, there are often a downward spiral of destructive patterns and maladaptive behaviors. The loss of self-esteem and satisfaction are threats to victims’ capacity to return to healthy “interpersonal functioning” (p. 606). While the current study explored the relationship between early sexual experiences and adult sexual self-esteem, it also made sense that sexual self-esteem would influence a person’s ability to be sexually satisfied and connected in adult romantic relationships.
As indicated in the above literature review, there is evidence to support the relationship that may exist between childhood sexual knowledge acquisition components, perceptions of early experiences, the age of experience, and adult relationship functioning. Only a portion of the relationship has been traced to victims of CSA. Other components such as pornography and media have been considered partial contributors to adult sexual self-esteem as have other components to some degree. Nevertheless, there was minimal evidence considering the relationship between all known child sexual knowledge acquisition components and adult ratings of sexual self-esteem. This research study was an investigation that explored the predictive relationship between these childhood sexual knowledge acquisition components, perceptions of the quality of the experience, age of experience, and the chosen dependent variable – adult sexual self-esteem.

**Sexual Self-Esteem - Implications for Sexual Health**

The implications of this research on children’s sexual knowledge acquisition are not only to provide safety, protection, and guidance for children, but additionally to improve understanding of the relationship between child sexual knowledge acquisition components and adult sexual self-esteem. This information is intended to aid adults who educate children about sexual health and safety. Parents and family have the potential to be the strongest influence on children with regards to sexuality (Morawska, et. al., 2015; Pluhar et al., 2006), still, the environment children occupy also creates meaning and influence in the child’s worldview (Lamb & Plocha, 2014).

Johnson (2006) clearly identified several boundary areas that parents and families may cross while attempting to teach children comfort with sexuality. She explained that typical activities shared with children during the newborn and toddler years such as co-bathing and
sleeping with children, for example, are not harmful, yet have the potential to become negative components in a child’s life normally after the age of seven if the child becomes uncomfortable. Furthermore, activities children may have witnessed of a more explicit sexual nature such as intercourse in vivo or through media, pornography, and explicit movies and videos may contribute to childhood sexual behavior problems. Johnson (2006) reported boundary crossings in many cases are parents attempting to be non-shaming or comforting to children’s needs and yet may be harmful to the formation of future intimate relationships as represented by case studies referred to in this research. Parents did not seem to have harmful intentions toward their children, yet were perpetuating negative behaviors.

The fact that multiple factors and relationships influence children was relevant in this study, particularly in the case of sexual health whether the influence was intentional or unintentional. Nevertheless, not all forms of influence may be healthy for children. The ways in which children learn to define their own sexuality in their younger years may have an effect on adult sexual self-esteem (Zeanah and Schwarz, 1996). This sexual self-esteem may have an impact on future relationship-building skills which potentially guide choice and pathways to adult intimate relationships (Morawska, et al., 2015; Moore and Davidson, 1999). Zeanah and Schwarz (1996) stated, “A better understanding of the subjective aspects of sexuality could result in more prudent educational and social policies and, perhaps, more successful services relevant to the significant problems of teenage pregnancy, sexually-transmitted diseases, and HIV/AIDS” (p. 1). Morawska et al., (2015) reported that their participants wished their own parents would have educated them as children, insinuating that this communication would have increased their comfort with sexuality and helped them in teaching their own children pertinent information. Parents typically develop comfortable communication patterns with their children but have
difficulty communicating information surrounding sexuality. This response in parents indicated the significant difference between sexual self-esteem and global self-esteem as a separate concept (Zeanah & Schwartz, 1996).

It is important to distinguish the difference between global self-esteem and sexual self-esteem. Coppersmith (1967) indicated that a sense of self-worth is different than sexual self-worth, specifically. Rosenberg, Schooler, Schoenbach, and Rosenberg, (1965) defined global self-esteem as, “the individual's positive or negative attitude toward the self as a totality” (p. 141). Zeanah and Schwarz (1996) reported that global self-esteem is a broader concept that did not indicate individual abilities and attributes within the sexual domain. Global self-esteem suggested a general positive or negative self-concept. Counterintuitively, high ratings of global self-esteem do not necessarily correlate with high ratings of sexual self-esteem. (Oattes & Offman, 2007). Rosenfeld (2004) discovered that global self-esteem does not indicate the ability to communicate properly about topics such as STI’s and sexual histories with partners.

Zeanah and Schwarz (1996) defined sexual self-esteem as, “the affective reactions to her subjective appraisals of her sexual thoughts, feelings and behaviors” (p. 3). The concept of sexual self-esteem was developed and defined when Zeanah and Schwarz developed the Sexual Self-esteem Inventory (1996). The instrument is intended to measure women’s sexual self-esteem only but has since been modified for use with men as well. The components of sexual self-esteem are defined more specifically in the instrument, therefore, demonstrating better reliability and validity with regards to sexual concepts compared with other, less defined measurements. These components or subscales are; skill/experience, attractiveness, control, moral judgment, and adaptiveness. Zeanah and Schwarz (1996) found that participants with high sexual self-esteem, generally reported high levels of sexual activity, however, these sexual
activities were within stable and committed relationships. Women who reported low levels of sexual self-esteem were those with high levels of sexual activity experienced outside committed relationships.

Zeanah and Schwarz (1996) indicated that there was a complex relationship between sexual behaviors and sexual self-esteem. One study found no sexual self-esteem differences in girls whether they were sexually active or not. In another study, girls who were sexually active reported having significantly lower sexual self-esteem than their abstaining peers, yet Zeanah and Schwarz indicated that girls who reported frequent sexual experiences reported high sexual self-esteem. However, these girls had been in long-term committed relationships.

Oattes and Offman (2007) suggested that people with positive sexual self-esteem are more likely to value their sexual life and experiences, often engaging in conversations about safe sex and satisfying sexual experiences. These authors suggested that an instrument that measured sexuality-related aspects such as sexual self-esteem would target sexual aspects more effectively. Oattes and Offman found that these conclusions are consistent with Coppersmith’s (1967) findings that reflected the idea that an overall sense of self-worth differs from the specifics of sexual self-worth. This suggested that when investigating the relationship between sexual behaviors and sexual self-esteem, it is important to use instruments that measured sexual self-esteem instead of global self-esteem (Oattes & Offman, 2007).

Global self-esteem is not found to be significantly related to a partners’ ability to share intimate details about sexually transmitted diseases or past sexual histories, whereas, the ability to engage in difficult conversations was linked to sexual self-esteem (Rosenfeld, 2004). Zeanah and Schwarz (1996) suggested that those with high global self-esteem in many aspects of their lives may still feel insecure about their personal sexuality.
Conclusion

The literature has shown that children have a number of avenues to obtain sexual knowledge with potentially positive and negative consequences. Parents/guardians, religion and community organizations strive to educate children about sex and sexuality in the best ways they knew how. Other knowledge acquisition components such as siblings, peers, media and pornography also demonstrated an influence on the development of child sexuality whether it be positive or negative. Other components such as child sex play have an important and essential role for children as they acquired this knowledge naturally and developmentally. And yet, this literature review reveals that some of these components may have need of further investigation for their potential effects on adult sexual adjustment. Because all sexual acquisition knowledge components are typically inadequate when they are the only source of knowledge, children may fill in the gaps or just simply explore other acquisition components out of curiosity. CSA is related to adult maladjustment and child sexual behavior problems but it is not the only contributor to adult sexual functioning. In other words, how are other components related to sexual self-esteem in adult relationships?

The goal of this study was to capture the other major contributing sources of sexual information in childhood, perceptions of the quality of information, the age of acquisition and the relationship with adult sexual self-esteem, thereby allowing parents and educators of all kinds a stronger empirical teaching foundation.
Chapter Three: Methodology

Methodology should grow out of a worldview that indicates how the researcher believes that knowledge is obtained. The worldview that is emphasized in this study is a post-positivist perspective. Creswell (2009) explained that post-positivists believe that, in the search for knowledge absolute truth does not exist. Post-positivists search to answer questions about life. They form theories and hypotheses about their theories, and then test those hypotheses through scientific measures (Creswell, 2009). Post-positivism is deductive, suggesting that initially, the research topic is reduced to a narrower perspective, information is collected and then the process of retesting is used to gain greater understanding. In this dissertation, researcher objectivity was essential and many controls were put in place to ensure that bias was alleviated. Information was extracted through instruments that had been created to measure an observable outcome in the most reliable and valid form. From this perspective, there was never evidence presented to prove the alternative hypotheses. The best that could be achieved would be for the researcher to reject the null.

This was a quantitative, non-experimental, correlational research study. A non-experimental study implies that there is no control group or random assignment. Random assignment requires that the participants be randomly assigned to a group without the researcher’s knowledge of their placement. The current study utilized a convenience sample from two universities. A non-experimental design allowed the researcher to collect data on variables of interest through observations or measurements (Cozby, 2015). In this study, the independent variables were the components through which participants acquired childhood sexual knowledge and experiences (IV1), the perceived quality of the information and
experiences (IV2), and the age at which participants acquired information and experience (IV3), in relationship to their perceived level of adult sexual self-esteem (DV).

The rationale for utilizing quantitative methodology was a desire to understand if there was a relationship between how children gained knowledge about sex and their adult sexual self-esteem. From a broader perspective, it was hoped that this research would aid those responsible for childhood sex education (parents, schools, religious organizations, etc.) as they pursue an agenda that not only adds to childhood safety and understanding, but also maximizes subsequent adult sexual self-esteem.

This chapter explores the methods that were used to organize, develop, interpret, and summarize the data that was collected (Creswell, 2009). The participants for this study have been introduced along with the research question and independent and dependent variables. The instruments have been explained giving details about the researcher-developed survey and the Sexual Self-esteem Inventory (Zeanah & Schwartz, 1996). Validity and reliability information have been reported for the Sexual Self-esteem Inventory, the information used to capture the dependent variable. Step-by-step procedures for this research project have been outlined followed by the proposed statistical analysis.

Participants

The total number of participants in this study was N = 195. Two hundred fifty-five participants initially entered the survey process. On further examination of the completed data, N = 16 participants did not match the age delimitation of 18-25 years old and N = 44 participants did not complete the second portion of the survey material which was the SSEI section. Thus, 60 potential participants were eliminated leaving at total of N = 195 participants completing the
entire survey package. Of the 195 participants, 48 identified as male, 144 identified as female, and three identified as “other.”

The ethnicity of the participant group was strongly homogeneous consisting of 84% White (N = 164), 5% Asian (N = 10), 5% Hispanic (N = 9), 3% Native American (N = 5), 2% African American (N = 3), and 2% Other (N = 3). The researcher categorized the religious make up reported by these participants into four categories: 52% Judeo Christian (N = 101), 2% Eastern religions (N = 3), 17% not religious (N = 33), and 30% no response (N = 58). Sexual orientation was reported as: 84% heterosexual (N = 164), 8% Bi-Sexual (N = 16), 2% Gay (N = 4), 2% Lesbian (N = 3), 1% Asexual (N = 2), 2.5% Pansexual (N = 5), and .5% no response (N = 1).

The majority of participants were solicited from the student body at the University of Montana. A number of teachers were approached and asked to allow their students to participate in this research study. Those who agreed distributed the survey and questionnaire through their learning management system (Moodle). The remaining participants were members of a counseling program at Gonzaga University where their students were younger than in most counseling departments. The number for each of these groups are not available due to the anonymous collection of data.

Permission was obtained from the Institutional Review Board of the University of Montana and amendments were completed to access participants across the university. The chair of the Counseling Department at Gonzaga University also granted permission to collect data with their counseling students.
Instruments: Independent and Dependent Variables

**Independent Variables: Demographic/Informational Questionnaire.** The first of the instruments administered was the demographic and information survey, which collected data concerning the independent variables. Independent variables were those variables that caused, influenced, or effected the dependent variable (Creswell, 2009). In the current study, no causal relationship was established, instead a relationship was explored between the independent variables, childhood sexual knowledge acquisition methods and related experiences, and the dependent variable, sexual self-esteem. The independent variables consisted of items contained in the demographic and informational survey created by the author. The information gathered was personal data such as: age, gender, religion, and socioeconomic status. Information was also gathered about the participants’ childhood experience of learning about sex and sexuality such as: who did they learn from? What was the quality of their experience? And, at what age did they first learn about sex? Appendix A contains the demographic and informational survey. To establish face validity with this survey, the researcher consulted with several professionals in this field of study and asked for feedback from Counselor Education students enrolled in an Individual Appraisal course and a doctoral cohort at the University of Montana.

**Dependent Variable: Sexual Self-Esteem Inventory.** The instrument that was used to measure the dependent variable was an updated and unpublished version of, *The Sexual Self-Esteem Inventory for Women* (SSEI-W) (Zeanah & Schwarz, 1996). This updated version was normed to include men and the author granted permission for its use (Schwarz, 1995; P. Zeanah, personal communication, Nov. 19, 2016). For this dissertation, sexual self-esteem was defined as: one’s affective reactions to their own sexual thoughts, feelings, and behaviors, and the extent to which they exhibit the ability to feel the value of their own sexuality including eagerness to
experience sexual intimacy with a partner (Zeanah & Schwarz, 1996, Gaynor & Underwood, 1995). This inventory included a long version of 81 items and a short version of 35 items. The short version was used in this research study (Swenson, Houck, Barker, Zeanah, & Brown, 2012).

The SSEI has five subscales (Zeanah, & Schwarz, 1996). Zeanah and Schwarz stated that when information was narrowed into subscales, the outcomes became a more reliable and valid representation of sexual self-esteem, nevertheless, the total score demonstrated reliability and validity since there was not a large distinction between the five subscales. The authors supported the use of the mean item score for the purposes of this research project (P. Zeanah, personal communication, Nov. 19, 2016). All questions were scored on a six point Likert scale, with 1 = strongly disagree and 6 = strongly agree. The authors created subscales to assess five different affective reactions to sexual self-esteem. These subscales were; 1) skills/experience, which was the ability to please or be pleased by, and to be available to a partner; 2) attractiveness, the person’s sense of self attractiveness, regardless of others’ opinions; 3) control of their own thoughts, feelings, and actions; 4) moral judgment – the person’s congruence with moral standards; and 5) adaptiveness – their personal goals and aspirations. In reference to the short form, the first subscale of skills/experience consisted of 7 items, the Cronbach’s alpha indicated a high degree of internal consistency at $\alpha=.88$ for males and $\alpha=.84$ for females. The second subscale, attractiveness, also with 7 items, yielded Cronbach’s alpha at $\alpha=.88$ for both males and females. The remaining subscales received high internal consistencies with control, moral judgment, and adaptiveness (all at 7 items each) scoring Cronbach’s alphas at $\alpha=.73, .81$ and .77 for men and $\alpha=.80, .80$, and .80 for females respectively (Zeanah & Schwarz, 1996). The total score for the short form had a Cronbach’s alpha of $\alpha = .94$ for both sexes. The
Attraction and moral judgment demonstrated a low-to-moderate correlation to skills/experience, control and adaptiveness of $r = .33$ to $.58$, however, the last three factors exhibit high intercorrelations of $r = .69$ to $.77$. Nevertheless, the five subscales have shown evidence of construct validity indicating that each subscale demonstrates a degree of independence (Zeanah & Schwarz, 1996). Zeanah and Schwarz reported that all the subscales exhibit discriminant validity in correlation with traditional global self-esteem (Rosenberg, et al., 1965) receiving $r = .44$, $.56$, $.45$, $.56$, and $.45$ respectively, with the total SSEI $r = .57$. Cronbach’s alpha for the current study reported an $\alpha = .89$.

For the purposes of this research study, the subscales were not analyzed individually since the research questions focused on overall measures of sexual self-esteem. The study explored the relationship between child sexual knowledge acquisition components and general sexual self-esteem. The mean item and standard deviation scores on the SSE short form, as reported by Zeanah and Schwartz (1996), were: males (M = 4.45) (SD = .71) and females (M = 4.22) (SD = .69). The subscales break down sexual self-esteem into specific categories that are not relevant to this research question, therefore, only the mean item scores have been considered.

**Procedure**

During spring semester, 2017, the researcher obtained Institutional Review Board (IRB) approval from the University of Montana before data was collected. The IRB requested that confidentiality not be a signed hardcopy, rather have the online informed consent be the only requirement to insure the greatest anonymity in this process. Upon IRB approval, an email was sent to instructors of departments such as counselor education, psychology, social work, health and human performance, women’s, gender and sexuality studies, and humanities requesting support in allowing students to participate in this research. The professors were asked to place a
message and the Qualtrics survey link on their learning management systems asking students to participate if they felt so inclined. The researcher did not attend the classes to offer instructions to protect the anonymity of the participants. However, there was one professor who requested the researcher attend and describe the research premise to his students and encourage them to participate. If offered as an in-class quiz, all students present that day received credit for participating in the research project whether they took the surveys or not, thereby keeping anonymity and volunteerism as directed by IRB. The majority of professors declined to offer extra credit. The time required for this activity took between 10 to 15 minutes. The total number of questions from both questionnaires was 60. All participants were given the option to not complete the surveys for any reason and without reprisals. The survey and questionnaire were developed to ensure minimal harm considering the intimate nature of the questions, and no identifying personal details of past events were elicited. Strict adherence to protecting participants’ anonymity and privacy were considered and enacted. Data was collected then analyzed through SPSS software.

**Data Analysis**

Descriptive statistics allowed the researcher to make concise statements about the data, using measurements of central tendency and describing the variability or the distance of the scores from the mean (Cozby, 2015). The mean was the measure of central tendency utilized and was the measure used to evaluate statistical significance when analyzing interval data. Descriptive statistics were used to represent reported responses obtained from the demographic and informational survey. The data was analyzed using SPSS software.

The inferential statistical analysis that was utilized for this research project was a standard multiple regression. This statistical analysis required a continuous dependent variable
and two or more continuous independent variables (IV) (Pallant, 2010). The independent variables were the responses from the participants on the informational and demographic survey. The IV’s were represented with three different scales of measurement: nominal, interval and ratio. The nominal variables were items such as the categories of specific sexual acquisition components: parents, sex education, peers, etc. These nominal components were assigned a dummy variable, meaning they were given a value of 0 or 1 representing the chosen learning acquisition by the participant. For example, if a participant selected that he/she learned about sex from a parent, the data reflected a value of “1” for parent, and a “0” for all other options. The questions that inquired about the quality of both learning about sex and the first sexual experience represented interval data and was scored on a Likert scale from 1 to 5, with 1 representing “negative” and 5 representing “positive.” Finally, the data collected regarding the age of the participants when they first learned about sex and their first sexual experience represented ratio data because of the possibility of having a true zero. Mean item scores on the Sexual Self-esteem Inventory (SSEI) represented the dependent variable. All items on the SSEI were summed and averaged to yield a mean item score, ranging from 1 to 6. The mean item score on the SSEI was symbolized by interval data as it was measured on a 6-point Likert scale.

Non-parametric statistics are typically used to analyze Likert scale data. Exact intervals do not exist with Likert data and this type of data collection is representative of rank ordering. However, Subedi (2016) explains that there is empirical research supporting the use of composite scores for all Likert items in parametric testing (Creswell, 2008; Joshi, Kale, Chandel, & Pal. 2015), providing the assumptions are understood with the data representing the proper size and shape (Murray, 2013). Averaging the item scores helped normalize the data allowing the researcher to conduct parametric testing. Zeanah and Schwartz (1996) also created the SSEI
through factor analysis which resulted in moderate to high reliability and validity. Subsequently, standard multiple regression was considered as the best fit for this research study allowing for the DV and all the IV’s to be entered into the model at the same time.

“Multiple regression tells how much of the variance in your dependent variable can be explained by an independent variable” (Pallant, 2010, p. 153). This measurement also evaluated the contribution of each sexual knowledge component in relation to the dependent variable. Performing a multiple regression test allowed the researcher the ability to enter all of the IV’s (sexual acquisition method, quality of perceived method, and age) in SPSS at the same time with the DV (SSEI). One advantage of using this analysis was that it reduced the chance of committing a Type I error by performing multiple analyses on the same set of data. Therefore, the alpha level was projected to be set at p<.025 to reflect that there were two analyses performed on the DV (SSEI) to test each hypothesis. However, realizing that there would only be one analysis conducted on all of the IV’s at the same time, the alpha level remained at p < .05.

The focus of analyses was on the following four questions from the informational survey in order to test the proposed hypotheses: 1) which sexual knowledge acquisition method was most influential under the age of 18 and; 2) with whom (generally not specifically) did the first sexual experience occur. The participants indicated their approximate age at which they first learned about sex, and the age of their first sexual experience. Specific examination was focused on the perceived quality of both the information received, and the initial sexual experience – 5 = very positive, 4 = somewhat positive, 3 = neutral, 2 = negative, or 1 = very negative – according to their present memory and recall. These independent variables were correlated with the information gathered from the Sexual Self-Esteem Inventory to parse out any predictive relationship between the sexual knowledge acquisition components, quality of experience, age of
experience, and responses to the Sexual Self-esteem Inventory. Post-hoc analyses examined the differences between acquisition methods, such as those who learned from parents as compared to those who learned from the media, etc., with regards to the quality of experience and SSEI scores. In addition, a post hoc analysis was performed exploring the quality of the experience by acquisition method to see if there were significant differences in quality ratings based on method of knowledge acquisition. In doing so, an assessment of sample size and homogeneity of variance was performed to ensure proper evaluation. The researcher used a between groups ANOVA for post hoc analyses. The significance level was set at p < .05 for all statistical tests.

Assumptions

Field, Miles and Field (2012) point out that assumptions make it possible to develop accurate conclusions about the research conducted. They purport that the different statistical models reflect different truths and each model needs appropriate assumptions to report findings accurately. The statistical significance must also be set a priori to eliminate bias in the results (Pallant, 2010). In this study, the alpha level for determining the statistical significance was set at p < .05. Furthermore, because multiple regression was used, six IV’s were entered at the same time with the DV. This statistic is calibrated to handle numerous IV’s at the same time as needed. Pallant (2010) explained that the specific assumptions for multiple regression are the least clear of the statistical techniques and are not very forgiving if violated. The assumptions for multiple regression are: sample size, multicollinearity and singularity, outliers, normality, linearity, homoscedasticity, and independence of residuals.

Sample Size. Pallant (2010) warned that multiple regression was not the technique to use if the sample size was small. In multiple regression, sample size is a statement of generalizability and if the sample size is too small, there will be very little scientific value in the
study (Pallant, 2010). The sample size in this research study did not reach the suggested number and thereby may explain why some of the predictors were not significant. The number of initial participants were (N = 255) and with those eliminated for not meeting the age limitation and those who did not finish the second half of the questionnaire (N = 44), the total participant sample was (N = 195).

**Multicollinearity and singularity.** Multicollinearity refers to the relationships between each of the independent variables indicating that the more correlated the independent variables are, the less likely that significance will result. In this research study, the IVs of sexual knowledge acquisition and first sexual experience were converted into dummy variables making them bivariate, greatly lessening the possibility of multicollinearity and singularity. Both of these assumptions were not violated, demonstrated through the observation of the scatter plot created by SPSS. It was important to assure that each independent variable was a clear construct by itself (Pallant, 2010).

**Outliers.** Outliers are those scores that are extreme in the initial data findings. The only testing that could be conducted to indicate outliers were the ages of acquisition of knowledge and experience, as these were the only true interval or ratio data. There were a few outliers on the high and low tails which created a fairly normal curve and for this reason were not eliminated. Pallant (2010) explained that these outliers could be eliminated or given a score that was closer to the established range. The decision about how to handle outliers was made after collecting the data.

**Normality.** This assumption indicated that the residuals were distributed normally around the predicted critical scores. This simply stated, all scores were expected to fall in a normal pattern along the regression line. Privitera (2015) defined residual variables as “the
variance in Y that was related to or associated with changes in X” (p. 535). He continued to explain that the distance of each data point from the regression line was the residual point; the farther away from this line, the greater the residual. The definition for critical values were those values that defined the boundaries for failing to reject the null hypothesis (Privitera, 2015). These values lie within the five percent or less area, whether a non-directional or directional analysis, indicating that the hypothesis was supported (Privitera, 2015). All of the variables seemed to be normally distributed and no violation of this assumption occurred.

**Linearity.** Linearity assumed that the residuals had a linear relationship to the critical variables. This assumption was also not violated.

**Homoscedasticity.** This assumed that there was an equal scattering of residuals disseminated along the regression line (Privitera, 2015), more concentrated on the line and thinning to the outside in a rectangular shape on the scatter plot. The visual evaluation of the scatter plots showed no indication of violation.

**Levels of Measurement.** There were two main categories of measurement, categorical and continuous (Field et al., 2012). Categorical measurements gave names to each variable in the study, such as; parents, peers, other child (less than two years younger) and so forth. Continuous measures were those that were given numbers or score values. Under each of these measures, there were two levels of measurement indicated. The two levels that belong under the categorical measurements were nominal and ordinal levels of measurement, which were referred to as non-parametric measures. These two levels of data were used when the IV and DV information was collected. The nominal level was represented by words, names and representative numbers which did not have a specific rank level such as parents, sex education, religion, siblings, peers, media, and pornography (Field, et al., 2012). The ordinal level of
measurement was symbolized by names, words, or representative numbers and was organized in rank order. These non-parametric levels of measurement were also known as discrete measurements, not being placed on a continuum but were of a particular value, such as a whole number (Howell, 2002).

The continuous variables were represented by interval and ratio levels of measurement (also called parametric measures). Interval measurements were typically numerically represented data that had equal distance between the numbers such as, 1, 2, 3, 4; or 5, 10, 15, and 20. An interval level measurement has no true zero (Field, et al., 2012). The argument was explored on the use of ordinal data as interval data for the purposes of statistical analysis. First, the creators of the DV (SSEI) developed reliability through factor analyses (Zeneah & Schwarts, 1996). Others have confirmed the ethical use of ordinal data as interval data such as Subedi, (2016) who wrote an article in the International Journal of Contemporary Applied Sciences, called “Using Likert Type Data in Social Science Research: Confusion, Issues and Challenges”. Several other authors who have corroborated this same message were: Carifio and Perla (2007), Creswell (2008), Joshi, et al. (2015), and Murray (2013) who have suggested that parametric testing can be conducted on summed Likert scales stated clearly the assumptions. This is the most commonly used measurement and was utilized in this research project to analyze the Likert scaled questions in both the IV and the DV.

Ratio was the final level of measurement. Continuous measurements illustrated degrees on a continuum with ratio using numbers “at any place beyond the decimal point” (Privitera, 2015, p. 19). Ratio numbers were represented in this research by the age category possessing potential for a true zero. This level of measurement has a true zero-point and allowed for continuous point values such as 2.5, 1.7 or 3.2.
Summary

In conclusion, the participants were contacted through the University of Montana and Gonzaga University, and invited to participate in the study. Upon informed consent, the researcher-developed demographic survey and the Sexual Self-esteem Inventory were administered. The procedure for the distribution of the research measures and participant instructions were established for ease of participation and collection of data. Finally, the research design was non-experimental using a multiple regression analysis to seek out any possible predictive relationships between the independent and dependent variables.
Chapter Four: Results

This dissertation explored and examined how adults recalled learning about and experiencing sex and sexuality as children, at what age they were first exposed to these two events, and the perceived quality of those events in relationship to their adult sexual self-esteem. After examining the correlations among these variables of interest, predictive relationships of each independent variable to a standardized measure of adult sexual self-esteem were investigated. The assumptions, descriptive statistics, and the central research questions will be outlined and research findings presented. Also, post hoc analyses were conducted examining the differences between SSEI scores and participants ratings of their quality of learning by sources of sexual knowledge acquisition.

Assumption Analyses

In multiple regression, the number of independent variables (IVs) that are entered into the model are not limited, making it possible to analyze the contribution of all IVs to the variance in the dependent variable (DV) at the same time. Both sexual knowledge acquisition components (IV1) and first sexual experience (IV2) were included in the model, therefore, the alpha level was not split as previously suggested at p < .025, leaving the alpha level at p < .05 for all statistical tests. The first analyses conducted on the data involved an assessment of the statistical assumptions of multiple regression. Pallant (2010) reported that the assumptions for multiple regression include sample size, outliers, normality, linearity, and homoscedasticity.

Dummy variables were created for the nominal IV’s – source of sexual knowledge acquisition, and first sexual experience. Because this action creates bivariate conditions (1 or 0), it was not possible to assess normality. All other assumptions were met through the observation of the PP plot and scatter plot graphs.
Descriptive Statistics

The descriptive statistics indicate the general demographic makeup of the participant sample and delineated the data. Participants totaled N = 195; 144 identified as female, 48 identified as male, and three identified as other. The mean scores on the SSEI for men and women were reported as males (M = 4.45) and females (M = 4.22), closely resembling the mean scores of the norming sample. The ethnicity of the participants consisted of 84% White (N = 164), 5% Asian (N = 10), 5% Hispanic (N = 9), 2.5% Native American (N = 5), 1.5% African American (N = 3), and 2% Other (N = 4). The researcher designated the religious orientations reported by the participants into four categories: 52% Judeo Christian (N = 101), 30% no response (N = 58), 17% no religion (N = 33), and 2% Eastern religions (N = 3). Sexual orientation was reported as 84% heterosexual (N = 164), 8% bi-sexual (N = 16), 2% gay (N = 4), 2% lesbian (N = 3), 1% asexual (N = 2), 2.5% pansexual (N = 5), and .5% no response (N = 1).

Four sexual knowledge acquisition components were most often reported by participants (79%): peers, sex education, parents, and media. Other sexual knowledge acquisition components (pornography and religion) were grouped together as “other” for the purpose of analysis. A breakdown of the reported sexual knowledge acquisition components is included in Table 1.
Total Number and Percentage of Reported Sources of Sexual Knowledge Acquisition

<table>
<thead>
<tr>
<th>Source of Learning</th>
<th>Total Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peers</td>
<td>66</td>
<td>34.02%</td>
</tr>
<tr>
<td>Sex Education</td>
<td>34</td>
<td>17.53%</td>
</tr>
<tr>
<td>Parents/Guardians</td>
<td>32</td>
<td>16.49%</td>
</tr>
<tr>
<td>Media</td>
<td>22</td>
<td>11.34%</td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td>20.62%</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: Out of 195 participants, 194 responded to this question.

Nearly all of the participants (97%) reported that their first sexual experience involved a person of the opposite gender. The least influential or most absent sources of learning about sex included: religion (N = 44, 22.68%), parents (N = 42, 21.64%), sex education (N = 37, 19.07%), pornography (N = 25, 12.88%), siblings (N = 21, 10.82%), peers (N = 12, 6.18%), media (N = 11, 5.67%), and other (N = 2, 1.03%). Out of 195 participants, 194 responded. Results are displayed in Figure 1.

![Figure 1. Reported least influential sources of learning](image)

The mean item score on the SSEI for all participants was M = 4.41 (SD = .785). Scores
on the SSEI ranged from 2.05 – 5.85. The mean reported age of learning about sex was M = 10.83 years (SD = 2.46) and the mean reported age of first sexual experience was M = 13.61 years (SD = 3.17). The average reported rating of quality of learning was M = 3.10 (SD = 1.12) and the average reported quality of experience was M = 3.37 (SD = 1.24). Mean and standard deviation values for the SSEI, age and perceived quality of learning, and age and quality of the first sexual experience are all reported in Table 2.

Table 2.

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSEI</td>
<td>4.4136</td>
<td>.78558</td>
</tr>
<tr>
<td>Age Learning</td>
<td>10.83</td>
<td>2.463</td>
</tr>
<tr>
<td>Quality Learning</td>
<td>3.10</td>
<td>1.125</td>
</tr>
<tr>
<td>Age Experience</td>
<td>13.61</td>
<td>3.178</td>
</tr>
<tr>
<td>Quality Experience</td>
<td>3.37</td>
<td>1.242</td>
</tr>
</tbody>
</table>

Note: SSEI rating scales were: 1=disagree strongly, 2=disagree moderately, 3=disagree mildly, 4=agree mildly, 5=agree moderately, and 6=agree strongly. The rating scales for quality of learning and experience were; 1=negative, 2=somewhat negative, 3=neutral, 4=somewhat positive, and 5=positive.

Regarding the participants’ reported first sexual experience, 81.03% reported their first sexual experience involved either a peer or self (e.g. masturbation). As a result, the researcher combined all other groups (parents, other adult family, adult stranger, a minor, sibling less than two years older, sibling less than two years younger, other child less than two years older, other child less than two years younger, and other) into one “other” category, as shown in table 3.
Table 3
*Total Number and Percentage of Reported First Sexual Experience*

<table>
<thead>
<tr>
<th>Source of Experience</th>
<th>Total Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peers</td>
<td>112</td>
<td>57.43%</td>
</tr>
<tr>
<td>Self</td>
<td>46</td>
<td>23.59%</td>
</tr>
<tr>
<td>Other sources</td>
<td>37</td>
<td>18.97%</td>
</tr>
<tr>
<td>Totals</td>
<td>195</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: Sources of experience that are included in the “other” category: parents (N = 3, 1.53%), other adult family (N = 2, 1.02%), other adult stranger (N = 11, 5.64%), minor (N = 9, 4.62%), sibling less than two years younger (N = 1, .53%), sibling less than two years older (N = 1, .51%), and other (N = 1, .51%), other child less than two years younger (N = 2, 1.02%), other child less than two years older (N = 4, 2.05%).

**Research Questions 1 and 2**

Question one stated, how did adults recall acquiring sexual knowledge as children and, when combined with perceived quality of method, and age, did these methods of knowledge acquisition relate to adult sexual self-esteem? Research question two asked how early sexual experiences, when combined with perceived quality of the experience and age of experience relate to adult sexual self-esteem? It was hypothesized that there would be significant relationships observed between the sources of learning, first sexual experience, age of learning and experience, and perceived quality of learning and experience, and mean scores on the SSEI. As described above, participants recalled learning from their peers 34.02% of the time, sex education 17.53%, and parents 16.49%. A Spearman’s Rho correlation coefficient was chosen to analyze the relationship between the ordinal and ratio-level variables because it can detect monotonic relationships among ordinal, interval, or ratio data that may not be linear. A Spearman’s Rho was used to analyze the monotonic relationship between age of learning and perceived quality of learning showing a statistically significant, yet weak negative correlation of $\rho = -.208 \ (p \ < .01)$. Quality of learning and quality of experience also showed a statistically significant, yet weak positive correlation of $\rho = .260 \ (p \ < .01)$. Because age is ratio or continuous...
data, a Pearson’s $r$ correlation was used to analyze age of learning and age of experience, showing a statistically significant, yet very weak positive correlation of $\rho = .168$ ($p < .05$). The correlation between age of learning and SSEI score was very weak and not significant ($\rho = -.044$, $p = .544$). A Spearman’s Rho correlation coefficient was also calculated between age of first sexual experience and perceived quality of experience. The results indicated that there was again, an insignificant, and very weak correlation between these variables showing $\rho = .052$, ($p = .480$). Also, age of first reported sexual experience (average age 13.73) did not significantly correlate with sexual self-esteem scores $\rho = -.089$, ($p = .221$). While some relationships were statistically significant, correlations were weak or very weak, therefore, I have failed to reject the null hypothesis. The correlation matrix detailing the relationships between the above-mentioned variables is included in Table 4.

Table 4

<table>
<thead>
<tr>
<th>Correlations</th>
<th>SSEI ITEMS</th>
<th>AGE LEARN</th>
<th>AGE EXPER</th>
<th>QUAL LEARN</th>
<th>QUAL EXPER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation</td>
<td>SSEI</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>-.044</td>
<td>-.089</td>
</tr>
<tr>
<td>Correlation</td>
<td>AGE LEARN</td>
<td>Correlation Coefficient</td>
<td></td>
<td>1.000</td>
<td>.168*</td>
</tr>
<tr>
<td>Correlation</td>
<td>AGE EXPER</td>
<td>Correlation Coefficient</td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>Correlation</td>
<td>QUAL LEARN</td>
<td>Correlation Coefficient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>QUAL EXPER</td>
<td>Correlation Coefficient</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

The following figures illustrate and describe the results from Table 4.
Figure 2. Relationship between age of learning and quality of learning. Age of learning and quality of learning indicated a significant, yet weak negative correlation: $\rho = -0.208$ ($p = .004$), suggesting that the higher the reported age of learning, the lower the quality of learning, and vice versa.

Figure 3. Correlations between quality of learning and quality of experience. The weak positive correlation suggests that participants who reported a positive learning experience may have also reported a positive first sexual experience: $\rho = .260$, ($p = .001$).
Figure 4. Correlation between age of learning and age of experience. The age of learning and age of first sexual experience was also positively correlated (ρ = .168, p = .040) suggesting that as age of learning increases, so may the age of experiencing sex.

Research Questions 3 and 4

Research question three asked if there was a predictive relationship between how children acquired knowledge about sex, perceived quality of method, age of knowledge acquisition, and scores on the SSEI. Research question four asked if there was a predictive relationship between first sexual experience, age of first sexual experience, perceived quality of experience, and SSEI scores. Research questions three and four were combined for the purpose of analysis, as all predictor variables were entered into the multiple regression model at one time. It was hypothesized that there would be a statistically significant predictive relationship between source of sexual knowledge, first sexual experience, perceived quality of learning and experience, age of learning and experience, and scores on the SSEI.

A multiple regression analysis was calculated to predict scores on the SSEI based on source of sexual knowledge acquisition, age of acquisition, perceived quality of learning experience, first reported sexual experience, age of experience, and quality of the experience.
The multiple regression analysis was not statistically significant. The model summary reported, that only 2.8% of the variance in SSEI scores was accounted for by this model \( R^2 = .028, F(10, 178) = 1.536, p = .130 \), therefore, I have failed to reject the null hypothesis. Variables that reported unique contributions and significantly predicted SSEI scores when all other variables were controlled for were; first sexual experience involving peers \( (\beta = .216, p = .039) \), also age of first sexual experience \( (\beta = -.154, p = .048) \). Other variables such as perceived quality of first sexual experience failed to significantly predict SSEI scores \( (\beta = -.150, p = .116) \), nor did the first sexual experience of self (masturbation) predict SSEI scores \( (\beta = .046, p = .641) \). There were no other variables that predicted SSEI scores in this model, therefore, I have failed to reject the null hypothesis (See Table 5).
Table 5
*Unique Contributions of Each Predictor Variable to SSEI Scores*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>4.481</td>
<td>.401</td>
</tr>
<tr>
<td>AGE LEARN</td>
<td>-.001</td>
<td>.024</td>
</tr>
<tr>
<td>AGE EXPER</td>
<td>-.038</td>
<td>.019</td>
</tr>
<tr>
<td>QUAL LEARN</td>
<td>.027</td>
<td>.056</td>
</tr>
<tr>
<td>QUAL EXPER</td>
<td>.073</td>
<td>.051</td>
</tr>
<tr>
<td>L PARENT</td>
<td>-.038</td>
<td>.154</td>
</tr>
<tr>
<td>L PEER</td>
<td>-.181</td>
<td>.140</td>
</tr>
<tr>
<td>L MEDIA</td>
<td>-.213</td>
<td>.195</td>
</tr>
<tr>
<td>L SEXED</td>
<td>.036</td>
<td>.168</td>
</tr>
<tr>
<td>E PEERS</td>
<td>.342</td>
<td>.164</td>
</tr>
<tr>
<td>E SELF</td>
<td>.085</td>
<td>.182</td>
</tr>
</tbody>
</table>

*R² = .028*

Note: *p < .05, **p < .01; L = Source of learning; E = Source of experience a. Dependent Variable: SSEI.

**Post Hoc Analyses**

A post hoc analysis of variance was conducted to examine if there were significant differences between sources of sexual knowledge acquisition on mean score on the SSEI.

Results indicated that there were no significant differences among sources of learning about sex on scores on the SSEI [F (4, 182) = 2.436, p = .421]. The mean and standard deviation values for each of the sources of learning and the SSEI scores are included in Table 6.
Table 6

Mean Item Scores on the SSEI by Sources of Learning

<table>
<thead>
<tr>
<th>Method of Learning</th>
<th>SSEI Mean Item Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>4.56</td>
<td>.81172</td>
</tr>
<tr>
<td>Sex Education</td>
<td>4.53</td>
<td>.68572</td>
</tr>
<tr>
<td>Peers</td>
<td>4.37</td>
<td>.80255</td>
</tr>
<tr>
<td>Parents</td>
<td>4.32</td>
<td>.84788</td>
</tr>
<tr>
<td>Media</td>
<td>4.25</td>
<td>.75334</td>
</tr>
<tr>
<td>Total mean score</td>
<td>4.42</td>
<td>.78732</td>
</tr>
</tbody>
</table>

Note: SSEI rating scales were: 1=disagree strongly, 2=disagree moderately, 3=disagree mildly, 4=agree mildly, 5=agree moderately, and 6=agree strongly. The rating scales for quality of learning and experience were; 1=negative, 2=somewhat negative, 3=neutral, 4=somewhat positive, and 5=positive.

A second post hoc analysis of variance was conducted to explore differences between sources of sexual knowledge and mean scores of perceived quality of the learning experience.

Results indicated that there were significant differences between sources of learning about sex and perceived quality of learning \[ F (4, 190) = 12.005, p = .000, \eta^2 = .20 \] reporting a medium eta squared effect size (Pallant, 2015). Only 194 participants were included in this post hoc analysis. Tukey’s post hoc analysis revealed that participants who reported learning about sex from a parent scored significantly higher on ratings of perceived quality of learning than those who learned from other sexual knowledge acquisition sources (p = .000). No other significant differences were detected regarding quality of learning and sexual knowledge acquisition sources. Mean and standard deviation values for quality of learning scores by source of learning are included in Table 7.

Table 7

Quality of Learning Mean Scores by Sources of Learning

<table>
<thead>
<tr>
<th>Source of Learning</th>
<th>Quality of Learning Mean Score</th>
<th>Standard Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>4.13</td>
<td>1.07012</td>
</tr>
<tr>
<td>Sex Education</td>
<td>3.26</td>
<td>.70962</td>
</tr>
<tr>
<td>Peers</td>
<td>2.91</td>
<td>.90002</td>
</tr>
<tr>
<td>Media</td>
<td>2.77</td>
<td>.97257</td>
</tr>
<tr>
<td>Other</td>
<td>2.60</td>
<td>1.33589</td>
</tr>
<tr>
<td>Total mean score</td>
<td>3.09</td>
<td>1.12226</td>
</tr>
</tbody>
</table>

Note: The scale for Quality of Learning is as follows; 1= negative, 2= somewhat negative, 3= neutral, 4= somewhat positive, and 5= positive.
Summary

The results of this study indicated that this model reported an adjusted $R^2 = .028$. Two variables contributed uniquely to the variance in SSEI scores: age of experience and first sexual experience involving peers. No other significant predictive relationships were detected between any of the other predictor variables and the criterion variable: SSEI scores. There were several significant, yet weak correlations between age of learning, age of experience, quality of experience, and quality of learning. The post hoc between groups ANOVA analysis revealed that there were no significant differences between the sources of learning and SSEI scores. The second between groups ANOVA revealed that participants who reported learning about sex from parents reported higher ratings of perceived quality of learning scores as compared to all other sources of sexual knowledge acquisition.
Chapter 5: Discussion

This dissertation investigated how adults recalled learning about sex as children and experiencing their first sexual encounters, while exploring how those events, when combined with reported age of learning and experience and perceived quality of learning and experience, might predict their present ratings of adult sexual self-esteem, as measured by the Sexual Self-Esteem Inventory (Zeanah & Schwartz, 1996). There were two primary areas of focus in the current study: source of sexual knowledge and first sexual experience. Additional foci included age of learning, sources of learning, perceived quality of learning, along with age of experience and perceived quality of experience, in relationship to the Sexual Self-Esteem Inventory (SSEI). The use of multiple regression was an effective statistical tool considering the number of independent variables entered into the model to assess their ability to predict scores on the SSEI.

Researching sexual experiences, especially in childhood, is a sensitive undertaking. There was a purposeful attempt to carefully inquire about the positive and/or negative sexual encounters that participants may have experienced and avoid triggering any potential uncomfortable feelings. The researcher acquired one of the least explicit measurements (the SSEI). The aim was to allow participants a non-offensive experience hoping to facilitate as much honesty as possible. Overall, this model did not result in a statistically significant outcome, however, interesting results were found. This chapter will review and offer some interpretation of the results obtained from the multiple regression, discuss limitations of the study, implications for practice, and directions for future research.

Research Questions 1 and 2

Research question one stated, how did adults recall acquiring sexual knowledge as children and, when combined with perceived quality of method, and age, did these methods of
knowledge acquisition relate to adult sexual self-esteem? Research question two asked how early sexual experiences, when combined with perceived quality of the experience and age of experience related to adult sexual self-esteem? The mean score for the SSEI was calculated at a mean item score of $M = 4.42$, ($SD = .789$); with a mean for males of $M = 4.50$; and a mean for females of $M = 4.40$, on a rating scale of $1 – 6$, where $1$ represents disagree strongly and $6$ represents agree strongly showing a similar mean score as the original SSEI norming group ($M = 4.45$, males; $M = 4.22$, females). The average age of learning reported by participants of $M = 10.9$ years and average reported age of first sexual experience of $M = 13.7$ years were not surprising. The overall perceived quality of learning and experience denoted somewhat neutral mean scores of $M = 3.10$, and $3.37$ respectively, from a rating scale from $1 – 5$, where $1 = \text{negative}$ and $5 = \text{positive}$. There were no significant relationships between the variables age of learning or quality of learning and experience and SSEI scores, conversely, there was a negative significant relationship to the age of experience ($\rho = -.089$) as indicated in the correlation matrix (Table 5). However, age of learning and perceived quality of learning indicated a significant, yet weak negative correlation: $\rho = -.208$ ($p = .004$), suggesting that the higher the reported age of learning, the lower the quality of learning, and vice versa. This lends support to the idea that positive learning can happen at young ages. The research supports that the best practice in educating children about sex is early and often (Lamb & Plocha, 2014; Morawska, et al., 2015). Participants who reported a positive learning experience may also have reported a positive first sexual experience: $\rho = .260$, ($p = .000$). This result is encouraging to parents who might be afraid to talk to children about sex for fear of conveying information inadequately, or of delivering information too soon. The research shows that even when parents deliver information inadequately, the information is still best received coming from parents (Lamb & Plocha, 2014;
Morawska, et al., 2015). It is hopeful to see that while a causal connection cannot be made between a positive learning experience and positive first sexual experience, a relationship between the two experiences is reflected in this study. The age of learning and age of first sexual experience was also positively correlated (ρ = .168, p = .021) suggesting that as age of learning increases, so does the age of experiencing sex. This is a surprising outcome not congruent with the literature, which reports the opposite – the younger a child learns about sex, the longer they may postpone sexual experiences (Landor et al., 2011; Moore & Davidson, 1999). However, this outcome may also speak to events in succession as learning and first sexual experience happening conjointly the older children learn. Research supports that parents have the ability to influence their children more than peers in those early years while developing patterns and values, even before birth (Pluhar et al., 2006). If parents do not create an open atmosphere for communicating about sex and sexuality with their children, children may look to their peers for information, and peer relationships may be very influential.

Not surprisingly, a large percentage of the participants reported learning about sex from their peers (34.02%) versus sex education (17.53%) or parents (16.49%). However, when participants reported learning about sex from a parent, the perceived quality of learning was significantly higher in comparison to all other categories of learning (p = .000). This is perhaps the most notable finding in the current study, and again lends support to the idea that parents should be the primary delivery method of sexual knowledge. There was little research in the literature about the effects of young people learning about sex from peers. In this study, participants indicated peers as their main source of learning. Perhaps as a result in many cases, much of the learning may be less than adequate and not based on sound sexual understanding.

Additional descriptive inquiries were pertinent to the research discussion. Interestingly,
97% of participants reported having their first sexual experience with a person/friend of the opposite sex, possibly speaking to the homogeneity of this sample. The second statistic of interest pertains to participants (22.68%) reporting that religion was their least influential or most absent source of sexual knowledge acquisition, followed by 21.64% of participants reporting that parents were the least influential, or most absent source of sexual knowledge, and then sex education at 19.07%. Religion as the least influential source of sexual knowledge was not unexpected as many of the participants reported no religious affiliation or chose not to disclose a religious orientation. It may be surprising to some that parents served as the second least influential source of sexual knowledge. These descriptive statistics on sources that were least influential are notable information gleaned from this study, especially when bearing in mind the average quality ratings of the learning experience by source of knowledge.

The results reveal that sexual information is most often disseminated through peers. This may cause some concern over the accuracy and helpfulness of the information that children are receiving. As stated in the literature review, children responded to sexual information given by parents more positively than any other source, even when the information was not well presented (Barone & Wiederman 1997; Lamb & Plocha, 2014).

As expected, a majority of the participants’ first sexual experiences were within peer relationships, also noting that from this participant sample, the majority of these experiences were with a peer of the opposite sex. Learning from a parent at a young age and experiencing sex for the first time with a peer may be the most positive methods of sexual knowledge acquisition. Since parents have been denoted as the best source of learning from the literature and peers are the most natural component for building intimate relationships, this combination of parents and peers suggests healthy sexual growth and development for adult functioning. The
results of this analysis did not identify any significant influence upon adult sexual self-esteem by the established sources of learning.

**Research Questions 3 and 4**

Research question three asked if there was a predictive relationship between how children acquire knowledge about sex, perceived quality of method, age of knowledge acquisition, and scores on the SSEI. Research question four asked if there was a predictive relationship between first sexual experience, age of first sexual experience, perceived quality of experience, and SSEI scores.

During the inspection of the raw data, the researcher observed that several of the sexual knowledge acquisition components were minimally selected. Therefore, the decision was made to combine low scoring categories into one “Other” category for the purpose of analysis. The sources of sexual knowledge that were combined were siblings, religion, pornography, and other, while parents, peers, media, and sex education were entered into the model as-is. The sources of experience that were combined in the sexual experience category were parents, adult family members, other adults, minors, siblings two years older and younger, children two years older and younger, and other. Peers and self were the only two remaining categories of first sexual experience that were analyzed representing 81.80% of the total participant count.

Overall, the results of the multiple regression indicated that the model accounted for only 2.8% ($R^2 = .028$) of the variance in the dependent variable: SSEI scores. Age of experience and first experiences with peers were the only two sexual knowledge acquisition components that indicated statistically significant unique contributions to the variance in SSEI scores. However, when all other predictor variables were removed, these two components were not found to be significant. This indicates that they are only significant in relation to the other predictor variable
in the model. With a low adjusted R squared score, these two variables are of little consequence to adult sexual self-esteem.

**Post Hoc Analysis**

Two between groups ANOVAs were conducted to explore differences between the SSEI scores by sources of sexual knowledge acquisition, and perceived quality of learning by sources of sexual knowledge acquisition. The first ANOVA indicated that there are no statistically significant differences between sources of learning and SSEI scores.

However, in the second between groups ANOVA, differences were observed between sources of sexual knowledge acquisition by average ratings of perceived quality of learning. In this case, participants who reported learning about sex from parents rated the quality of their learning experience significantly higher than any other source of sexual knowledge acquisition. These results corroborated prior research suggesting that children learn and trust information given to them by their parents more than any other source (Barone & Wiederman 1997; Lamb & Plocha, 2014). Again, the results indicated that significantly fewer participants actually learned about sex from a parent, leaving one wondering how parents might become more empowered to talk to their children about sex; early and often.

The literature review substantiated that parents as a source of sexual knowledge offered the most benefit to children when teaching them about sexuality (Lamb & Plocha, 2014; Morawska, et al., 2015). The literature is not substantive with other sexual knowledge acquisition components such as peers. However, peers, as a source of sexual knowledge, have demonstrated a strong presence in the current study and are worthy of future research with regards to adult relationship functioning.
**Implications**

Even though the selected independent variables did not significantly predict SSEI scores, there were other implications offering meaningful results. The implications for this study were two-fold, 1) parents were seen as the highest perceived quality source of sexual education and yet they were one of the most absent source of sexual information, and 2) the current study and prior research show a need for more research into peer influence for both learning and experience since peers were found to be the most common source of sexual knowledge ($N = 66, 34.02\%$) and are co-participants in the majority of reported first sexual experiences ($N = 112, 57.73\%$).

The results of this study suggest that parents could benefit from this information and become more involved in their children’s sex education which may improve the quality of the learning experience and potentially their children’s adult sexual functioning. According to the results, parents provide the highest quality of sex education for their children and unfortunately, they were the least involved or most absent in this learning experience next to religion. As parents learn and understand the magnitude of this responsibility, this education may aid children in developing the potential sexual confidence desired as they grow into young adults, or in most cases, provide them with a trustworthy and reliable source of sexual knowledge. Obviously, there are many factors that influence healthy sexual development, nevertheless, this would be a logical and beneficial beginning.

The second implication is that peers are, at present, the main source for both sexual knowledge and experience. As the research indicated, peers showed a significant contribution to the variance in sexual self-esteem scores and they are a large player in both the sexual learning and early sexual experiences and demonstrate that greater research is warranted on the influence
of this profound component.

Limitations

The overarching limitation to this study was the relatively small sample size and homogeneous demographic make-up. The majority of the participants reported coming from middle class, White families, female gender, and heterosexual orientation. Having a larger number of females than males may have influenced the sexual knowledge acquisition components in one direction or another. Even the largely heterosexual orientation of the participants may have biased the findings.

Also, a significant number of participants either did not complete the survey (SSEI) after answering the participant learning and experience portions of the survey. Nineteen percent of the total \( N = 255 \) initial participants did not finish the survey and 8.2% did not meet the age limitation, lowering the sample size to \( N = 195 \). This low sample size limits the generalizability of the study.

Participants were asked to recall information from their past experiences about learning and experiencing sex and sexuality for the first time. Even though this method of collecting data has been recommended as one of the best ways to gather this data (Lamb & Plocha, 2014; Okami, et al. 1997), recall also has its flaws. Recall can be subjective, maturation can influence perceptions, and other life events may diminish or exaggerate the memory of past experiences. However, an effort was made to create questions that were as clear as possible.

Nevertheless, the creation of the demographic and informational survey by the researcher may have been a limitation in itself, and perhaps some of the items on the questionnaire were unclear. The possibility of participants not understanding the questions accurately is a concern as there were questions with multiple responses that could have misdirected participant
understanding and direction of the question. In future research, further consultation and pilot testing will contribute to the validity of this questionnaire.

Another limitation of this study may have been that sexual self-esteem was not the right construct to examine, or the instrument selected may not have fully captured its meaning. When considering sexual self-esteem, the emphasis placed on the first learning and experiential events of the participants’ life may not have been the determining event for the construct of sexual self-esteem. Other life experiences may have been more relevant to this construct. Also, participant recall may have shown limitations of accuracy compounded by variables of unreliable memory, diverse environmental situations, inaccurate observation, and maturation (Lamb & Plocha, 2014).

This research study only covered a limited number of sexual knowledge acquisition components: parents, sex education, religion, siblings, peers, media, and pornography representing the learning experience. The choices presented for whom was involved in the first sexual experience contained potentially too many selections; perhaps this question could have been more general resulting in more accurate responding.

Another limitation of this study was the constraint of the first learning and experiential events. These first experiences may not have been the determining factor in the participants’ development of sexual self-esteem. The ability to open the range of experiences may have acquired more depth in realizing components that have more of a relationship to the construct of sexual self-esteem.

**Future Research**

There is extensive need for further research in the area of sexual learning and early sexual experiences, and their relationships with adult relationship functioning. Which factors truly
relate to sexual self-esteem if they are not these sexual acquisition components? What is the relationship of these sexual knowledge components to adult sexual functioning? Are we defining sexual self-esteem effectively for research? There are many areas for future research connected to this topic such as peer relationships that are so prevalent in both learning and experience; how and why children accept parental information even when presented inadequately; and exploring sexual knowledge acquisition components and their potential connections to adults sexual functioning using a qualitative approach to inquiry. Development of a sound qualitative study could have the ability to separate out the more specific details of what has been presented in this study, and perhaps bring to light an area of adult sexual functioning that is reasonably linked to early childhood sexual knowledge acquisition and sexual experiences. This study developed a broad overview of the relationships between source of sexual knowledge, early sexual experiences, age of learning and experiences, perceived quality of events, and SSEI scores. Further study is needed to develop a clearer understanding of potential relationships between each variable of interest and adult sexual functioning.

The seemingly most beneficial future research connected to this dissertation would encompass educating parents about their critical value in educating their children about sex and sexuality earlier and more consistently. As they came to understand the outcome and benefits of their efforts, a new trend in child sexual education could be initiated. Longitudinal research could explore the effect that quality sex education, provided by parents, has on adult sexual functioning and intimate relationship satisfaction. This information may also be meaningful to young adults who experience relationship problems such as early sexual promiscuity, divorce, unwanted pregnancy, and a host of partner difficulties. If young adults possess an understanding of healthy sexuality, they have the potential to create strong intimate relationships and a life
filled with satisfying companionship. However, these benefits are anchored in strong future research focused on ways to strengthen parent involvement in sex education with their children.

Conclusion

The strength of this research study lies in the post hoc findings. As reported by the participants, peers have been the most active source of learning and experience with little research to show the benefits or consequences of this finding. Parents were reported as the highest quality teachers of sexual education above all other sources of learning and unfortunately were the most absent participants in this teaching process. The ultimate goal, as supported by the results of this dissertation, is to find ways to help parents understand the value of their involvement in teaching their children about healthy sexuality and the impact this may have on healthy future intimate relationships.
References


McHale, S. M., Bissell, J., & Kim, J. (2009). Sibling relationship, family, and genetic factors in


Robinson, K. H. (2012). ‘Difficult citizenship’: The precarious relationships between childhood,

doi:http://dx.doi.org.weblib.lib.umt.edu:8080/10.1177/1363460712436469


Appendix A: Demographic Survey

Childhood Sexual Knowledge Acquisition

ONLINE SURVEY CONSENT FORM. You are invited to participate in a research project that will ask you questions about how you learned about sex and how you perceive sexuality. This online survey should take about 15 to 20 minutes to complete. Participation is voluntary, and responses will be kept anonymous to the degree permitted by the technology being used. We will not be collecting any personal information through the internet.

Consent You have the option to not respond to any questions that you choose. You do not need to be sexually active or in a romantic relationship to complete this survey. Participation or non-participation will not impact your relationship with the University of Montana or any other educational system with which you belong. Submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age. If you have any questions about the research, please contact the faculty advisor, Dr. Veronica Johnson, via email at veronica.johnson@mso.umt.edu. If you have any questions regarding your rights as a research subject, contact the UM Institutional Review Board (IRB) at (406) 243-6672. * I have read the above information and agree to participate in this research project.

☐ Yes, I want to continue (1)
☐ No, I do not want to continue (2)
If Yes, I want to continue Is Selected, Then Skip To I am between the ages of 18 and 25. If No, I do not want to continue Is Selected, Then Skip To End of Survey

Definitions: Sexual learning = times when receiving information about sexuality in an educational way. Sexual experience = a physical experience such as; romantic or sexual kissing, petting, masturbation, penetration, being touched inappropriately or something similar

Age Qualification I am between the ages of 18 and 25.

☐ Yes (1)
☐ No (2)
If No Is Selected, Then Skip To End of Survey
D1 What is your gender identity?
- Male (1)
- Female (2)
- Transgender (3)
- Other (4) ________________
- Prefer not to respond (5)

D2 What is your sexual orientation?
- Heterosexual (1)
- Gay (2)
- Lesbian (3)
- Bisexual (4)
- Queer (5)
- Asexual (6)
- Pansexual (7)
- Prefer not to respond (8)
- Other (9) ________________

D3 What is your ethnicity?
- White (1)
- African American (2)
- Hispanic (3)
- Asian (4)
- Native American (5)
- Pacific Islander (7)
- Other (6) ________________

D4 What religion or spiritual affiliation best describes you:
- Specify (1) ________________
- Prefer not to respond (2)

D5 At what age do you recall first learning about sex: not simply hearing something in passing but learned from "the talk", looking up info on the internet, reading a book, a friend or sibling taught you something specific, pornography, or something similar?
- Specify (1) ________________
D6 At what age do you recall your first significant sexual experience such as; romantic or sexual kissing, petting, masturbation, penetration, being touched inappropriately or something similar?

○ Specify (1) ________________

D7 What or whom do you think was your most influential source of sexual information when you were under the age of 18? Please select only one of the following.

○ Caregivers/parents (1)
○ Sexual education (7)
○ Religious teachings (2)
○ Siblings (3)
○ Peers (4)
○ Media (5)
○ Pornography (6)
○ Other (8) ________________

D8 Using your answer from the previous question and looking back at your most influential source of sexual information, how would you judge the emotional quality of the learning experience?

○ Negative (1)
○ Somewhat negative (2)
○ Neutral (3)
○ Somewhat positive (4)
○ Positive (5)

D9 How accurate do you feel your most influential source of sexual information was?

○ Not accurate at all (1)
○ Somewhat inaccurate (2)
○ Somewhat accurate (3)
○ Completely accurate (4)
D10 Which of the following do you think was your least influential or most absent source of sexual information when you were under the age of 18? Please select only one of the following.

- Caregiver/parent (1)
- Sex Education (2)
- Religious teachings (3)
- Sibling (4)
- Peers (5)
- Media (6)
- Pornography (7)
- Other (8) ____________________

D11 Thinking back to your first sexual experience, whom did it involve?

- Parents/Guardians (1)
- Other ADULT family member (e.g. step-parent, uncle, aunt) (2)
- Sibling (less than 2 years’ age difference) (3)
- Sibling (more than 2 years’ age difference) (13)
- Other CHILD family member (e.g. cousin; less than 2 years’ age difference) (4)
- Other CHILD family member (e.g. cousin; more than 2 years’ age difference) (14)
- Peers (around same age) (5)
- Minor (under 18, but more than 2 years’ age difference, not family) (9)
- Other ADULT (stranger, acquaintance) (6)
- Self (masturbation) (7)
- Other (8) ____________________

D12 Using your answer from the previous question and looking back on your first sexual experience, how would you describe the emotional quality of your first sexual experience?

- Negative (1)
- Somewhat negative (2)
- Neutral (3)
- Somewhat positive (4)
- Positive (5)

D13 Based on the first sexual experience question above, was your experience with a same-sex person or opposite sex person or NA?

- Same-sex person (1)
- Opposite sex person (2)
- NA (3)
D14 When you had a question about sex or sexuality, what source of information would you turn to first for answers?

- Parent/Caregiver (1)
- Religious teachings (2)
- Sibling(s) (3)
- Peers (4)
- Media (5)
- Pornography (8)
- Sexual education (6)
- Other (7) ________________

D15 As a child, how did you perceive the socioeconomic status of your PRIMARY home?

- Below poverty level (1)
- Lower-Middle class (2)
- Middle class (3)
- Upper-Middle class (4)
- Upper class (5)

D16 Between the ages of 5 and 11, what would best describe the relationship of your primary caregiver?

- Single (1)
- partnered/dating (2)
- Cohabitating (3)
- Married (5)
- Divorced (6)
- Re-married (7)
- Separated (8)
- Widowed (11)
- Other (10) ________________

D17 As a child, how would describe your relationship with your primary caregivers?

- Negative (1)
- Somewhat negative (2)
- Neutral (3)
- Somewhat positive (4)
- Positive (5)
D18 As far as communication about sex and sexuality in your childhood home, how would you rate your family communication culture generally? Rate from 1-10, Closed communication is 0 and completely opened is 10.

D19 What is your current relationship status?
- Single (1)
- Partnered (2)
- Cohabitating (3)
- Married (4)
- Divorced (5)
- Widowed (6)

D20 If you would like to explain something that was not expressed in this survey, please feel free to do so in the box below.
Appendix B: Sexual Self-Esteem Inventory – Short Form

Instructions: This inventory asks you to rate your feelings about several aspects of sexuality. There are no right or wrong answers, reactions to feelings about sexuality are normally quite varied. From the rating scale near the top of each page, select the response which most closely corresponds to the way you feel about each statement. Write the number for that response in the space before the statement.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disagree</td>
<td>Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>Strongly</td>
<td>Moderately</td>
<td>Mildly</td>
<td>Mildly</td>
<td>Moderately</td>
<td>Strongly</td>
</tr>
</tbody>
</table>

___ 1. I wish I could relax in sexual situations.
___2. I am pleased with my physical appearance.
___3. I feel emotionally vulnerable in a sexual encounter.
___4. I feel good about the place of sex in my life.
___5. I feel guilty about my sexual thoughts and feelings.
___6. I feel I am pretty good at sex.
___7. I hate my body.
___8. I am afraid of losing control sexually.
___9. I like what I have learned about myself from my sexual experiences.
___10. My sexual behaviors are in line with my moral values.
___11. I feel that “sexual techniques” come easily to me.
___12. I am pleased with the way my body has developed.
___13. I feel I can usually judge how my partner will regard my wishes about how far to go sexually.
___14. I don’t feel ready for some of the things that I am doing sexually.
___15. Some of the things I do in sexual situation are morally wrong.
17. I would like to trade bodies with someone else.
18. I feel physically vulnerable in a sexual encounter.
19. Sometimes I wish I could forget about sex.
20. I have punished myself for my sexual thoughts, feelings, and/or behaviors.
21. I do pretty well at expressing myself sexually.
22. I worry that some parts of my body would be disgusting to a sexual partner.
23. I worry that I won’t be able to stop something I don’t want to do in a sexual situation.
24. I wish sex were less part of my life.
25. I never feel bad about my sexual behavior.
26. I feel embarrassed about my lack of sexual experiences.
27. I would be happier if I looked better.
28. I worry that things will get out of hand because I can’t always tell what my partner wants in a sexual situation.
29. I am glad that feelings about sex have become a part of my life.
30. I never feel guilty about my sexual feelings.
31. I feel good about my ability to satisfy my sexual partner.
32. I am proud of my body.
33. I worry that I will be taken advantage of sexually.
34. In general, I feel my sexual experiences have given me a more positive view of myself.
35. From a moral point of view, my sexual feelings are acceptable to me.
Sexual Self-Esteem Inventory: Short Subscales
(short)(long)

**Skill and Experience**

6. 26. I feel I am pretty good at sex.
11. 39. I feel that "sexual techniques" come easily to me.
16. 44. Sexually, I feel like a failure.
21. 52. I do pretty well at expressing myself sexually.
26. 56. I feel embarrassed about my lack of sexual experience.
31. 63. I feel good about my ability to satisfy my sexual partner.

1 73. I wish I could relax in sexual situation

**Attractiveness**

2 2. I am pleased with my physical appearance.
7. 27. I hate my body.
12. 45. I am pleased with the way my body has developed.
17 48. I would like to trade bodies with someone else.
22 53. I worry that some parts of my body would be disgusting to a sexual partner.
27. 57. I would be happier if I looked better.
32. 64. I am proud of my body.

**Control**

3. 8. I feel emotionally vulnerable in a sexual encounter.
8. 13. I am afraid of losing control sexually.
13. 18. I feel I can usually judge how my partner will regard my wishes about how far to go sexually.
18. 41. I feel physically vulnerable in a sexual encounter.
23. 58. I worry that I won't be able to stop something I don't want to do in a sexual situation.
28. 70. I worry that things will get out of hand because I can't always tell what my partner wants in a sexual situation.
33. 80. I worry that I will be taken advantage of sexually.

**Adaptiveness**

4. 14. I feel good about the place of sex in my life,
9. I like what I have learned about myself from my sexual experiences.
14. I don't feel ready for some of the things I am doing sexually.
19. Sometimes I wish I could forget about sex.
24. I wish sex were less a part of my life.
29. I am glad that feelings about sex have become a part of my life.
34. In general, I feel my sexual experiences have given me a more positive view of myself.

**Morality**

5. I feel guilty about my sexual thoughts and feelings.
10. My sexual behaviors are in line with my moral values.
15. Some of the things I do in sexual situations are morally wrong.
20. I have punished myself for my sexual thoughts, feelings, and/or behaviors.
25. I never feel bad about my sexual behaviors.
30. I never feel guilty about my sexual feelings.
35. From a moral point of view, my sexual feelings are acceptable to me.

Table I.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Full Subscales</th>
<th></th>
<th>Short Subscales</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>items</td>
<td>Males</td>
<td>Females</td>
<td>items</td>
</tr>
<tr>
<td>Skill &amp; Experience</td>
<td>18</td>
<td>94</td>
<td>92</td>
<td>7</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>17</td>
<td>94</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>17</td>
<td>87</td>
<td>88</td>
<td>7</td>
</tr>
<tr>
<td>Adaptiveness</td>
<td>15</td>
<td>90</td>
<td>89</td>
<td>7</td>
</tr>
<tr>
<td>Morality</td>
<td>14</td>
<td>79</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Total Scale</td>
<td>81</td>
<td>.97</td>
<td>.97</td>
<td>35</td>
</tr>
</tbody>
</table>
Note -- Sample sizes for alpha coefficients range from 127 to 141.

Table 2

Intercorrelations among subscales and total scores for long and short versions of the SSEI by gender of participant.