# AZUSA PACIFIC UNIVERSITY

# HOW DIFFERENTIAL ASPECTS OF SEXUAL EDUCATION AFFECT SEXUAL COPING IN RELIGIOUS AND NON-RELIGIOUS UNDERGRADUATES

by

Kathleen M. Bono

A dissertation submitted to the

School of Behavioral and Applied Sciences
in partial fulfillment of the requirements
for the degree Doctor of Psychology

Azusa, California

July, 2014

UMI Number: 3619277

### All rights reserved

#### INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



#### UMI 3619277

Published by ProQuest LLC (2014). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.
All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC. 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346

### AZUSA PACIFIC UNIVERSITY

# HOW DIFFERENTIAL ASPECTS OF SEXUAL EDUCATION AFFECT SEXUAL COPING IN RELIGIOUS AND NON-RELIGIOUS UNDERGRADUATES

by

Kathleen M. Bono

has been approved by the

School of Behavioral and Applied Sciences
in partial fulfillment of the requirements
for the degree Doctor of Psychology

Christopher J. Adams, Ph.D., Committee Member

Diane Puchbauer, Psy.D., Committee Member

Robert K. Welsh, Ph.D., ABPP, Dean, School of Behavioral and Applied Sciences

© Copyright by Kathleen M. Bono 2013

All Rights Reserved

#### **DEDICATION**

This project is dedicated to my best friend and husband Eric. Without you, I literally would not have applied to APU, would not have written this paper, and would not be pursuing this amazing career. I am grateful for your patience, support, challenge, distraction, and hugs when things got tough. You were critical in the development of this project, as you pushed me to think about difficult questions and gave me ideas for different directions to take my findings. I know the doctoral process has not been easy on me, nor has it been on you. Thank you for bearing through it with me and for encouraging me to always strive to be better. You continue to be my coach, cheerleader, and teammate in life. I love you.

#### **ACKNOWLEDGMENTS**

The following manuscript is the result of more than 5 years of hard work and could not have been successfully completed without the guidance and support of faculty, colleagues, friends, and family members alike. First, I would like to thank my incredibly brilliant and utterly patient advisor, Dr. Kevin Reimer, without whom this study would not have been possible. His willingness to extend the *Religiosity and Sexuality* data set, to sit through hours of meetings, and to offer statistical direction and education throughout the process allowed me to develop competence in quantitative research.

Next, I would like to thank my committee members, Dr. Christopher Adams and Dr. Diane Puchbauer, for working on this project with me. Dr. Puchbauer's passion for young people, clinical expertise, and excellence as a sexual educator was a source of inspiration regarding the practical application of my dissertation. Dr. Adams, an APU campus pastor and psychologist, encouraged me to remain curious in exploring how religiosity can impact the lives of our sample, specifically regarding their sexuality.

I would also like to extend gratitude to Ying Jiang, Ph.D. of Azusa Pacific University's Statistics department, as well as Psy.D. student Stephanie Wolfe, M.S., both of whom were pivotal in the statistical analysis of the data. Without Dr. Jiang, compiling a comprehensive and complete data set would have been far more difficult, making her expertise of the List-Wise deletion method greatly appreciated. Stephanie's assistance

was instrumental in helping me learn Multiple Regression analysis, as well as in identification of the extent of religiosity in our sample.

As a systemic thinker, I have always considered the success of one person to truly be the success of many. The term, "It takes a village, to raise a child" has always felt true to me, and thus I am extending appreciation and acknowledgement to all the mentors, teachers, leaders, and friends who have helped me grow up to be the person I am today. My first grade teacher who taught me to read and fostered my sense of independent learning, my youth pastor who watched me grow up and recently officiated my wedding, and most recently the faculty and staff of DGP at APU, who have offered the academic and practical foundation to make this project a reality. To all those who have been part of my village, I am grateful.

Last but certainly not least, I express my deepest and most heartfelt thanks to my parents, Ed and Ida Dena. My parents have always supported my goals and cheered me on in obtaining them. Much of how I work and the drive and focus I put into my goals comes from my dad. Without his lessons and encouragement regarding business and work ethic, I doubt I would be as successful a researcher and clinician as I have become. I am equally so grateful for my mom's interest in my education, excitement to read drafts or papers, and eagerness to understand what I will soon be doing as a psychologist. Her passion for learning and eagerness to understand people and situations clearly passed to me. She provided the foundation for my future in clinical work and excitement for research.

#### **ABSTRACT**

# HOW DIFFERENTIAL ASPECTS OF SEXUAL EDUCATION AFFECT SEXUAL COPING IN RELIGIOUS AND NON-RELIGIOUS UNDERGRADUATES

Kathleen M. Bono Doctor of Psychology, 2014 Azusa Pacific University Advisor: Kevin S. Reimer, Ph.D.

This project addresses what best predicts sexual coping in religious and non-religious undergraduates. Data was obtained from a grant funded study, *Sexuality, Coping, and Moral Decision-Making in Christian Adolescents*, by James Furrow, Ph.D. and Kevin Reimer, Ph.D. Participants included undergraduate, religious, and non-religious students from a number of Christian and public universities across the country. Utilizing all sexual education, religiosity, and coping data obtained through a number of different checklists and instruments, conclusions were identified following application of Factor Analysis and Multiple Regression statistics. Findings indicated positive predictive relationships between *Religious Beliefs and Practices* and two different coping styles, *Thought and Action* and *Relying on Others. Socially Oriented* sexual education was also predictive of *Positive Reframe* coping.

# TABLE OF CONTENTS

Dedication	iii
Acknowledgments	iv
Abstract	vi
List of Tables	xi
Chapter	Page
1. Overview of the Study	1
Relevant Background	2
Education	2
Religion	5
Coping	7
Statement of the Problem	9
Significance of the Study	10
2. Review of the Literature	11
Sexual Education	13
Current Beliefs about Sexual Education	13
What Systems Work to Reduce Sexual Risk in Adolescence?	16
Other Sources of Sexual Education	17
Religion and Sexuality	26
Religious Sexual Education	27

Chapter		Page
	Adolescent Sexual Development and Experience	31
Co	ping Strategies	35
	Thought Suppression	35
	Affect Suppression	37
	Religious Actions as Coping Strategies	39
	The Connection between Sexual Education, Religion, and Coping	42
Sui	mmary	43
3. Method		45
Par	ticipants	46
Ins	truments	47
	Demographics Questionnaire	47
	Religious Commitment Inventory	47
	Sexual Education	48
	Personal Choice/Attitudes	48
	Emotional Coping	49
Pro	ocedure	49
Da	ta Analysis	50
4. Results.		53
Exp	ploratory Factor Analysis and Reliability Statistics	53
	Coping	53
	Sexual Education	57
	Religiosity	59

Chapter	Page
Descriptives	60
Multiple Regression	62
Summary	65
5. Discussion	68
Hypothesis 1	68
Hypothesis 2	71
Coping Development	72
Religion as a Method of Meaning-Making	76
Hypothesis 3	78
Clinical Implications	80
Educational Interventions	81
Clinical Interventions	83
Limitations	88
Future Research	89
Final Thoughts	91
References	94
Appendix	Page
A: CSHRB Manuscript Proposal Form	105
B: Institutional Review Board	107
C: Demographics Questionnaire	124
D: RCI-10	127
F: Sexual Education	130

Appendix	Page
F: Personal Choice/Attitudes	133
G: Coping.	136
H: Informed Consent Form	140
I. Manuscript Suitable for Publication	144
J. Curriculum Vitae	188

# LIST OF TABLES

Table 1: Exploratory Factor Model for Coping Composites	56
Table 2: Confirmatory Factor Analysis for Sexual Education	59
Table 3: Factor Analysis for Religiosity	60
Table 4: Multiple Regression Analysis of Religious and Education Factors on	
Reliance on Others	63
Table 5: Multiple Regression Analysis of Religious and Education Factors on	
Thought and Action	64
Table 6: Multiple Regression Analysis of Religious and Education Factors on	
Positive Reframe	64
Table 7: Descriptive Statistics of All Variables	66
Table 8: Inter-Variable Correlation	66

#### **CHAPTER 1**

#### OVERVIEW OF THE STUDY

A few bits of sexual commentary from Mark Regnerus's (2007) Forbidden Fruit:

Life in Lubbock, Texas taught me... that sex is the most awful, filthy thing on
earth and you should save it for someone you love.

#### -Butch Hancock

It's just like if somebody says "don't go in that room." And they tell you that every day. Before too long, you're gonna go in that room because you want to know what's in there that you can't see. And so I think a lot of parents make a mistake by always saying "don't do it."

-Carla, 17-year-old evangelical Protestant

Sexuality in the United States takes many forms. The media is saturated with hyper-sexualized youth and adults in popular television shows, movies, and pornography. People engage in sexual activity casually, with few consequences. Only 3% of sex scenes portrayed in popular media involve any apparent contraceptive use; furthermore, the lessons that sex can be safe and without consequence are overwhelmingly suggested (Regnerus, 2007, p. 137). America is becoming "sexier" while the focus of sex is becoming younger (Regnerus, 2007, p. 4). There is the prevalent belief that sex in society is dirty, taboo, and something to be hidden or kept secret. Alternatively, humans experience sexuality as sacred and blessed; and it is described throughout biblical texts as

a holy act between men and women. Beyond this relationship, it may be "sinful" and is to be avoided. There seems, however, to be a significant discord, specifically in Western U.S. society. Sociologist and author Mark Regnerus argued further, "As a society, we are caught somewhere between understanding sex as sacred and thinking it profane" (p. 4). People struggle to find the middle ground in which society's majority lives, functions, and experiences its sexuality.

The process of learning and understanding one's sexuality involves awareness of the body while also understanding desires that are natural and intrinsic. Furthermore, self-concept, love, and connection all add to a young person's sexual development. Like many other subjects and facets of life, the journey to understand one's sexuality begins with education. This topic of sexual education is highly controversial in the United States and contributes in large part to this study; recognizing where and from whom adolescents and young adults receive sexual education is of particular interest.

# **Relevant Background**

#### **Education**

For this study, attention is given to literature focusing on sexual education throughout the developmental process while focusing specifically on the junior and senior high school years. The reason for such limitation is that most young people between the ages of 13 to 18 years receive sexual education through school or in church settings. Sexual education offered in the college setting is rarely researched, and the literature is scarce regarding the benefits or costs it presents. Thus, throughout this study, literature focused on high school aged students is provided given that these are the years in which the study sample was most likely to receive sex education at all. Furthermore, the developmental process of *adolescence* appears to be expanding. Where adolescence

used to encompass the ages of 12 to 18 years, researchers have found that adolescence actually extends well into the early to mid-20s in some cases. As a result, much of the literature focusing on adolescent sexual development is, in fact, relevant to a college sample.

Sexual education in the United States is a concept that is highly variable (Berne & Huberman, 2000). Each of the 50 states develops and controls its own sexual education material, without the guidance of a standardized curriculum to address specific topics or offer equivalent information across the country (Berne & Huberman, 2000). Furthermore, the increased popularity of abstinence-only messages in academic sexual education over the last 10 to 20 years has incited controversy for schools that deviate from this norm and opt to teach comprehensive sexuality education (Boonstra, 2008). Regardless of the choice of each individual state and its preference to offer abstinence-only or comprehensive sexual education, research focused on contraceptive-based sexual education (programs focusing in depth on physiology and anatomy) is extensive and fairly conclusive regarding its effectiveness.

Kirby (2002) found that "sexuality and HIV curricula do not increase sexual intercourse, either by hastening the onset of intercourse, increasing the frequency of intercourse, or increasing the number of sexual partners" (p. 52). In his 2002 meta-analysis of the 28 studies, one-third found that these programs delayed the initiation of sex, and five studies showed the programs reduced the frequency of intercourse as well. Regnerus (2007) also argued for the necessity of education in the classroom as a method to counteract the availability of "pseudo-education" available via the Internet and other media (p. 59).

There is extensive research of different venues that offer sexuality education including the home, peer group, media, and church or religious organizations, all in addition to the academic setting. Kirby (2001) suggested the salience of peers as a significant source of sexual education. Young people learn from each other via sharing information, stories, successes and failures in experience, and through positive or negative encouragement or pressure. Epstein and Ward (2008) addressed how different sources of sexual education affect the messages that adolescent boys receive and how that information is utilized. They cited a study by Lefkowitz, Boone, and Shearer (2004) where college age men were surveyed; and seven basic topics were discovered regarding sexuality discussion. They found dating was cited most frequently in peer sexual conversation, followed by sexual behaviors and feelings, with abstinence and fertility issues being discussed least (Epstein & Ward, 2008, p. 115). Coleman (2007) also addressed the issue of a desired source of sexuality education in his study of British religious adolescents. He found approximately 40% of the young people surveyed mentioned friends as a preferred source of sexual education (p. 81). One must not forget the importance of the social group as a whole. The group itself acts as an agent of change wherein the social norm, or group standard, becomes the benchmark to which the individual may hold himself or herself accountable (Kirby, 2001; Regnerus, 2007).

Parents are another source for learning. They provide young people with initial understandings about sexuality, which directly affect their attitudes and behaviors. Parents are the first teachers for most life lessons for their children; and the issues of how, when, and what is taught regarding sexuality are crucial concerning how teenagers experience sex in the future. The importance of understanding what factors can affect a parent's "performance" or availability to the children must also be examined. To fully

comprehend the particular role parents take as sexual educators, one should examine and understand the delineation between morals or values-based sexual education and how that differs from the traditional biological component. Research on the topic of parents as sexual educators is abundant, and the ability to develop this venue is provided.

Last is the issue of the media. Over the past 15 to 20 years, the media has permeated more and more of society's ideals and influence over young people. Due to the influx of technology, sexuality has exploded into various media forums. Again, the question arises of what this means in the lives of today's young people. It is crucial to understand what role the media is playing in the sexual education of teens and young people. Another focus is to understand what the technological lessons are, how permanent they become, and how they affect young people positively or negatively. Throughout the course of this project I attempt to answer some of these questions, as well as make connections to the necessity of coping and further examining the interaction the media may or may not have with religious ideals and values.

### Religion

Religion plays a significant role in how people understand their world, make meaning of their environment, and develop understandings about topics and life lessons. Sexuality is no exception. The interplay between sexuality and religion is paramount across the board. Religion and sex are both elemental life pursuits that access some of the most basic precepts of what it is to be human (Regnerus, 2007, p. 6).

For the sake of this study, the term *religion* is used to encompass the very vast dimension of Christianity, with the bulk of literature focused on Protestant denominations. Although this examiner understands that one tradition does not replicate across all Christian groups, Regnerus (2007) relayed that just over 30% of American

young people identify with a denomination typically considered evangelical (sometimes called conservative) Protestant. The second largest percentage of religious youth demonstrate Roman Catholic belief systems (23%), followed by Mormon youth at about 3%. The remainder of young people adhere to Jewish, Muslim, Hindu, Buddhist, or other religious traditions comprising approximately 6% total. About 16% of American youth identify as not religious (p. 12). Furthermore, according to Reimer (personal communication, 2009), the populations from which the samples for this study were polled are predominantly Protestant Christian Universities; and to maintain consistency throughout the work, the term *religious* encompasses the general themes that surround Protestant faith traditions. It is consistently noted, however, that variety and diversity are prevalent even throughout the Protestant traditions; attention to differences between congregations is noted.

Different religions address the issue of sexuality in a number of ways and assign to it different meanings. In the Hindu religion of India, the Kama Sutra is considered a sacred text and is referenced in the understanding of sexuality as an action and a practice to be celebrated and enjoyed. In Protestant Christianity, sexuality is addressed in the Holy Bible. These messages, however, are much more ambiguous. The book *Song of Solomon* heralded sexuality and the marital union as a demonstration of God's love toward his people. The sexual relationship between man and woman was celebrated and blessed. However, in the New Testament, Paul warned the church of the destruction that sexuality can bring on believers. He denounced lustful thoughts, urged chastity, and above all commanded sexuality stay within the confines of the marital union.

Modern day religious doctrine has taken these messages and taken them in many different directions. Engagement in sexual relations outside the marital union is strictly

forbidden in some Protestant congregations, discouraged in others, and in more progressive churches, ignored or simply unaddressed. Young people are, however, typically instructed through programs like *True Love Waits* and *Abstinence Only* to endorse the message that sexuality is inappropriate in any situation other than marriage. Furthermore, the positive messages regarding marital sexual satisfaction are also religiously embedded. The overarching problem with these current programs is the matter of the in-between. Young people are taught that sexuality (sexual behaviors including intercourse and non-coital acts, as well as positive sexual self images) is to be avoided, not thought about, not discussed, and definitely not engaged in; however, they are also promised a pleasurable, if not magnificent, experience if they succeed in waiting until marriage. The discordance of these opposing lessons is another focus of this study. I want to understand not only how this developed attitude toward sexuality interfaces with the many facets of sexuality education, but also how it interacts with the *Coping* variable.

## Coping

A simple definition of coping as defined by Wikipedia is the process of managing taxing circumstances; expending effort to solve personal and interpersonal problems; and seeking to master, minimize, reduce, and/or tolerate stress. Although research has addressed the need for coping in instances such as trauma, defect, or loss, the connection of coping to a daily struggle, particularly one that society endorses while many religious communities discourage, is new territory. This type of coping can assume many forms including thought and/or affect suppression, religious practices such as prayer, the use of community accountability, and even self-injurious behaviors.

Thought and affect suppression are considered negative and often maladaptive coping mechanisms. Thought suppression has been examined over the years in countless

studies and by authorities such as Wegner, Schneider, Carter, and White (1987), Carver (2006), and Rassin (2005). The general theme conveyed throughout research is the influx of the target thought as a rebound effect (Wegner et al., 1987). When an individual tries to suppress thoughts or ideas, the focus becomes the suppression of the thought, thus the thought itself. The relevance of the thought is not only in and of itself, but also on the necessity to ignore or not think about it. The rebound effect can cause further need for coping.

Affect suppression carries a similar consequence; however, the rebound effects can be even more stimulating due to the fact that the target thought is emotionally primed. Wegner, Shortt, Blake, and Page (1990) found that utilizing this form of coping would not only have conflicting affects, but also makes what was being avoided more stimulating. They coined the term *intrusion reactions* as feelings of bodily arousal due to intense emotions, which would re-induce target thoughts.

Religious practices such as prayer and the use of community accountability are also methods used in the coping process. Prayer was defined by Bade and Cooke (2008) as "thoughts, attitudes, and actions designed to express or experience connection to the sacred" (p. 123). A person who prays may be attempting to connect with something that is apart from the self and also to escape from the unwanted thought or feeling – a relief from pressure is the goal.

Another form of religious practice as a coping mechanism can be seen in the development and utilization of community. Community offers group norms to which adolescents can seek adherence. They are encouraged and supported in their decisions and kept accountable for any deviations from the group-norm. This option can be utilized as a coping mechanism in that it offers a group or belonging factor to the table of

confusing sexual decision-making. Emile Durkheim found that "collective religiosity and common ritual practice provides individuals with both an obligation and a desire to conform to community norms" (Regnerus, 2007, p. 196). In the context of adolescent sexuality and sexual decision-making, the group is highly critical when delineating normative behaviors that are appropriate and acceptable. Thus, the likeness within the group provides legitimacy to the choices made and decreases the need to account for one's behavior, which may be in contrast to the societal norm.

A final coping mechanism is the use of self-injurious behavior. Wagner and Rehfuss (2008) looked at the relationship between self-injurious behaviors, sexual self-concept, and a conservative Christian upbringing. Self-injurious behavior, or SIB, is defined as the "deliberate, direct destruction, or alteration of body tissue without conscious suicidal intent, that results in injury severe enough for tissue damage to occur" (Wagner & Rehfuss, 2008, p. 173). This could include actions such as cutting, picking at skin or hair, or battering one's own body. The process of self-injuring is not a new concept to this generation; cutting and pulling of hair has been utilized as a coping strategy by individuals to relieve stress related to anxiety, fear, and depression. Young people wrought with confusion, living in a home or being raised in a culture that requires an inhibition of sexuality while living in a society that exploits it, might be led to the same conclusions: the utilization of extreme measures to relieve emotional distress (Wagner & Rehfuss, 2008).

#### **Statement of the Problem**

This interplay between coping, education, and religious ideals is one that is convoluted and misunderstood. Although the research is abundant regarding these separate subjects, there is very little literature commenting on the relationship of all three.

The current study addresses how different aspects of sexual education affect sexual coping comparatively between religious and non-religious undergraduate samples. By developing and testing hypotheses regarding the relationships between each of the individual methods of sexual education along with the coping strategies, and considering the specific necessities of this particular population, I hope to understand how best to address the education and training needs of the population on the topic of sexuality.

# **Significance of the Study**

The purpose of research is to better serve the individuals who provide their time and experience. Thus, this study identifies how to better connect with religious young people on the topic of sexuality. I wanted to understand what aspects of education, if any, are inducing a need to utilize different coping behaviors, either positive or negative, between religious and non-religious undergraduate students. A more important question is whether the coping behaviors being used are having a positive or negative effect on these individuals? Perhaps knowing this will change the way sexuality is discussed with young people so that it becomes less anxiety provoking and more holistic in nature.

#### **CHAPTER 2**

#### REVIEW OF THE LITERATURE

During my doctoral program, I have often had the opportunity to work with undergraduates in the classroom, as a teaching assistant, guest lecturer, and mentor for a particular area of study. The following is a short example of my experience as a TA in an undergraduate psychology classroom:

While discussing sexuality, sexual education, and sexual backgrounds with a group of predominantly Christian undergrads, I could hear the proverbial pin drop. I asked what kinds of sexual education the students had received throughout their lives, what sex-ed meant to them, and what they had learned from it. These questions were met with wide-eyed stares, downcast eyes, and the awkward silence of the group trying ardently to regulate their experience and words.

Hesitantly, those who were either married or engaged raised their hands and shared experiences of pre-marital counseling with their significant others in a church context. These experiences seemed to consist of glowing words regarding what the Lord had in store for them in their upcoming sexual relationships. Rarely were they provided practical knowledge, biological information, or even tips regarding what to expect during a potentially anxiety provoking wedding night. Soon, others began to timidly raise hands, offering experiences of minimal sexual education in their high school health classes.

Some students, blessed with MDs for parents, shared their experiences of watching

videos of live births; being shown pictures of infected genitalia; and being given a cold, dry, physiological overview taught in the same way one might learn the structures of the brain or skeleton.

Finally, a few brave students began to voice their frustrations regarding their experiences of sexual education. They expressed discouragement that in the church they had been taught that "sex is bad." Engaging in sexual activity prior to or outside marriage, even thinking about it inappropriately, corresponded with self-imposed guilt and repentance. However, they concurrently learned in bible studies focused on the Old Testament book Song of Solomon or in lessons about marital relationships that sex can be a glorious experience. If one could wait until marriage, then he or she would be blessed with an amazing sex life. The discussion highlighted the lack of education for the time inbetween. On the whole, these students had not been instructed on *how* to have a celebrated sex life. How can a couple have these experiences if they do not know where to touch each other to provide pleasure or how to relax and be comfortable with nakedness when they have been constantly reminded to cover up and be chaste?

As a result of this lack of information and the clear disconnect between dogma and life experience, the question remains of how young people cope with their sexuality. If the lessons they learn are wrought with ambiguity, then how do they cope with the urges and thoughts that are a normal part of human sexuality? This particular quandary is the impetus for the current research study. I will address the question of how young people, particularly young Christian individuals, cope with feelings of a sexual nature, recurring sexual thoughts, and sexual behaviors in relation to their religious experience and the sexual education they have received. Furthermore, I investigate how sexual

education attained in different environments and from different sources might affect coping differently? Has education learned in the public school system affected stress management strategies or relieved anxiety better than education attained in church environments or from friends, family, or the media? This is the question this study explores: How differential aspects of sexual education affect sexual coping comparatively in religious and non-religious undergraduates.

#### **Sexual Education**

#### **Current Beliefs about Sexual Education**

To answer such a question, sexual education must be explored in its entirety. What are the current beliefs regarding sexual health education both in the public arena and in academic settings? Berne and Huberman (2000) addressed this question with extensive qualitative research to examine differences between European countries and the United States. Previous research had shown that three countries, the Netherlands, Germany, and France, boasted the lowest rates of teen pregnancy and STDs in the world in contrast with the United States, which maintains some of the highest. Their article relayed information regarding how the media is used in each country to deliver safe sex messages to the populace and to adolescents specifically. They examined school-based sexual education programs, the availability of reproductive and sexual health services to young people, and the roles that family and religious influences played in each country.

Berne and Huberman (2000) found several contrasts between how these three European countries and the United States relate to adolescents as sexual beings. The three European countries all accepted sexuality as a developmental experience to be proactively encouraged, in contrast to the U.S. consideration of it as taboo. All three

countries proactively educated, celebrated, and created open forum for discussion in at least one area of their lives regarding the sexual maturing of adolescents. The goal was not to keep their young people from abstaining, but to create a synonymous relationship between sexual experience, responsibility, and safety. Multiple recommendations were made by the authors regarding changes in U.S. public policy to allow education both in abstinence and protective sexual behaviors. They suggested developing better health care services for adolescents to utilize, more sexual education provided in the school systems, and even programs to assist parents and teachers in learning to discuss sexually related topics with their teens. Lastly, they stressed the importance of a "national proactive agenda to reconcile religious doctrine with sexuality as a human quality, and to express public support for abstinence and protection as hierarchical values for sexual health in society" (Berne & Huberman, 2000, p. 198). These suggestions offer a comprehensive shift in the national attitude regarding the integration of sexuality and adolescence. The taboo conceptualization of many Americans on the issue of adolescent sexuality plays a considerable role in the education of young people. Berne and Huberman offered an alternative picture and consequences when this shift occurs.

Somers and Surmann (2005) further addressed the question of what beliefs and actions are held regarding sexual education in an economically and ethnically diverse high school-aged sample, as well as the importance of the different sources through which it is obtained. They found that schools have shown to have positive effects on sexual knowledge; however, they have not significantly affected teens' sexual attitudes or behaviors directly. The parental impact has shown to affect the behavior and attitudes of teens depending on the quality and amount of sexual communication that occurred. This

study gives particular credence to the importance of the parental relationship and the potency of parents' sexual discussions with their teens. Moore and Davidson (1999) found that in a group of 717 unmarried college women, those who talked about sex first with mothers were more likely to utilize contraception at first intercourse than those who learned first from other sources. Somers and Surmann further suggested that fathers are also becoming more and more important in adolescent sexual health.

The impact of peers was addressed, wherein Somers and Surmann (2005) found that when parents can affect behaviors and attitudes, peers are more connected with sexual behavior. When teens believe their friends or peers are sexually active, they too report higher levels of sexual activity. Peer relationships factor into family environments, where older siblings who are sexually active can influence the future behavior of younger siblings.

The media is another educational venue found to affect sexual attitudes more so than behavior (Somers & Surmann, 2005). Ward (2000, as cited in Somers & Surmann, 2005) "reported a positive relationship between time spent viewing videos and primetime television and the tendency for females to view dating as a game, to perceive women as sex objects, and to believe that the behavior of males is motivated by sex" (p. 3). The importance of understanding the role that media is playing in the lives and education of American young people is imperative if knowledge and health are priorities for them.

Lastly, Somers and Surmann (2005) reported later learning from any source and less learning in school programs significantly predict more frequent sexual activity, including oral sex and sexual intercourse. The trend in the United States of waiting to educate young people on issues of sexual health and development, if they are offered

education at all, is negatively affecting them. This must also be considered when thinking about religious upbringing, which carries emotional and spiritual factors as well.

## What Systems Work to Reduce Sexual Risk in Adolescence?

It is important to note that 34.3% of all sexually active young women in the United States become pregnant before the age of 18 years (Hamilton & Ventura, 2012); and of the 25% of sexually active individuals in the United States, half of new STDs reported occur in young women 15 to 24 years of age (Centers for Disease Control, National Survey of Family Growth, 2011). Thus, the importance of this research is without question. In a country where pregnancy and STD rates are remarkably high, understanding which preventative measures are successful and which are not is exceedingly important. Furthermore, to truly understand the connection between coping skills, sexual education, and religious belief systems, one must decipher the research to understand what coping strategies are reducing anxiety and stress.

To connect the dots between educational practice and factual change in adolescent behavior, Kirby (2001) used past and present research. He demonstrated how group norms and relational connectedness affect adolescent sexual decision-making. He argued that these two topics should be given more attention in research as well as in the development of alternative programs to reduce risky behavior. Furthermore, he maintained that social norms and group connectedness could explain many of the research findings currently in publication. This becomes clear when realizing that adolescents are deeply connected to family, peer, and other social networks, all with different norms regarding sexual and contraceptive behavior. If connectedness is one variable that affects young people most, then it is reasonable to assert that norms of each

particular group shape the futures and sexual outcomes of adolescents' attitudes and behaviors

Kirby (2002) authored another article focusing on four models that aid in the reduction of child bearing, pregnancy, and unprotected sex in young people. He critically analyzed data results of 73 studies that addressed different sexual prevention programs. The first group of studies focused on sex and STD education programs that covered abstinence as well as condom and contraception use. One substantial finding was that "sexuality and HIV curricula do not increase sexual intercourse, either by hastening the onset of intercourse, increasing the frequency of intercourse, or increasing the number of sexual partners" (p. 52). Of 28 studies examined, one-third showed that these programs delayed the initiation of sex, and five studies demonstrated these programs reduced the frequency of intercourse as well. Three studies demonstrated a decrease in sexual partners after teens participated in comprehensive education programs. The combination of sexuality and HIV training seemed to be most salient with high-risk teens and communities. These findings address adult concerns regarding the implementation of sexual education curricula in the academic setting. Knowing that the education of young people is not going to negatively affect their sexual decision-making overall allows more open dialogue on this topic.

#### Other Sources of Sexual Education

Research is plentiful regarding comprehensive and abstinence-only educational programs. Yet, to fully understand the degree of knowledge adolescents attain regarding sexuality, other possible sources must be considered. The family is a primary environment for such education to be provided. The area of parent-child communication

has been thoroughly researched (Meschke, Bartholomae, & Zentall, 2000); and understanding its role in attitudes, behavior, and coping strategies is a key piece.

Research has also suggested that parents excel in offering specific types of sexuality-based education, values and relationship-building particularly (Snegroff, 2000). However, depending on their level of sexual knowledge, perceived understanding, and religious beliefs, their messages can be unconsciously impacted regarding the depth and breadth of information they impart.

Second, the role of media must be addressed. In today's technologically operated world, much of the sexual information that young people attain is within the context of the social agenda. Television, movies, and the Internet provide observers with a highly romanticized understanding of how sexuality is lived out and what can be expected. Teens and young adults engage in sexual relationships without a thought to safety, contraception, or the risk of pregnancy (Regnerus, 2007). Furthermore, sexual stereotypes and misogynistic ideals are prolifically represented in gross abundance across the web, unchecked for young people's eyes (Subrahmanyam & Greenfield, 2008).

Another mode of education is found in peer relationships. Understanding the information that is passed and shared between peers is quite important, because peer influences appear to affect adolescent behavior significantly. Kirby (2001) and Regnerus (2007) studied group norms and group influence. They suggested that the social groups in which a teen is connected provide significantly more influence on behavior than any other variable. As such, being aware of the type of communication shared among adolescent groups can provide a keen understanding of what group norms may be. In a study focusing on the sexual education of boys, Epstein and Ward (2008) discussed how

peer communication regarding sex covers a wide range of topics including intercourse, HIV/AIDS, contraception, romantic relationships, and pregnancy.

Family. The home environment is pivotal for gaining knowledge about life. However, the availability of sexual information is highly understated and often misunderstood. Parents are the teachers of most life lessons for young people; and the issues of how, when, and what is taught regarding sexuality are crucial concerning how teenagers experience sex in the future. What are parents teaching about sexuality (Kirby, 2001; Regnerus, 2007; Sneed, 2008)? A second piece to understand is what factors affect a parent's "performance" or accessibility to the children (Snegroff, 2000). Often, parents do not neglect important sex conversations with their teens without cause; there are other factors involved. Third is the delineation between morals and values-based sexual education and how they differ from the practical biological component (Hoge, Petrillo, & Smith, 1982). The literature has suggested that parents are more likely to provide values and morals-based lessons to young people.

The family unit is a central factor in the education and development of teens, and the importance of modeling plays a pivotal role in the decision-making practices of adolescents. Kirby (2001) contended that if parents model positive behaviors and attitudes regarding contraception, then young people are more likely to utilize contraception when they do engage in sexual activity. Equally, if sexuality is addressed in a stricter and more conservative manner and modeled in a way that is uncomfortable, then adolescents are more likely to engage in behavior that is risky or unsafe. Snegroff (2000) addressed the issue of modeling through nonverbal communication of sexual messages. Simply, the way parents approach the issue of sexuality, either with positive

confidence or uncomfortable hesitation, presents messages regarding the safety of communication of the topic. When teens learn that sex is a taboo topic, the likelihood of them engaging in conversation with parents is greatly reduced, thus limiting the ability of parents to engage their teens in a safe and healthy way. Ultimately, the quality of the parent-child communication can be addressed when looking at how effective family systems are on the positive development of sexual attitudes and behaviors.

Powell (2008) suggested five factors that affect positive influence by parents on their teens regarding sexual messages. First, parents often communicate information to their children in the same way they experienced from their own parents. Second, perceptions of one's own sexual knowledge will affect their comfort level in talking with their children regarding such issues. Third, the acceptability of comprehensive sexual health education in the school system likely contributes to the depths parents might go in offering sexual education to their children. Powell suggested that parents who are favorable toward comprehensive sexual education harbor more positive feelings and higher comfort levels across the topic and, thus, are more likely to offer the information to their children at home. Fourth, more so than fathers, mothers are involved in their children's sexual health education. Fifth, parents are more likely to discuss biological information than to share personal experience or to broach topics that are more intimate. Parental involvement in providing young people with information and the extent to which this information was welcomed or rejected was dependent on the relationship between parent and young person initially. The difference in interaction, either previously positive or negative, affected whether participants believed that sexual conversations with parents were helpful and acknowledged or considered inappropriate and later avoided.

Another issue connected to the debate of parent-teen sexual discussion is the concept that talking about sex increases the likelihood of earlier sexual debut. Ream and Savin-Williams (2005) evaluated the effects of sexual debut in adolescents and continued sexual activity, relative to the relationships they had with parents both before and after sexual debut occurred. They found that positive health education and parents' ability to maintain strong adult relationships with their teens after sexual debut encouraged healthy sexual decision-making and decreased risky sexual behavior. The findings of the study also found that prior to debut, increased closeness in all family dyads predicted a reduced likelihood of sexual activity overall.

Gender and age were factors when assessing the number of sexual discussions between parents and teens. Parents were far more likely to speak with teenage girls than boys and equally more likely to talk to early adolescent teens than pre-adolescent children (Powell, 2008). This research suggested that relationally engaging parents spend less time in problem-focused interaction and share closer parent-child bonds. Such relationships generate young people who are less likely to engage in sexual activity.

Another point is whether or not parents are having these conversations at all; and, if not, then what affects parental "performance" or availability. In other words, if parents are not talking to their young people, what is holding them back? Snegroff (2000) noted that regardless of conversation content, parental attitudes regarding sexuality and sexual health may be inadvertently transmitted. The particular way parents speak about sexual issues demonstrates their attitudes, consciously and unconsciously. Hesitations, stutters, discomfort, or avoidance of the subject entirely send the message that sexuality is uncomfortable, awkward, and/or taboo. Snegroff argued that this type of education begets

negative consequences. Without intent, parents send the message that sexuality should not be discussed, that the subject is not open, and worse that parents are unavailable to teach or aid their kids regarding this subject, sending teens elsewhere for information and support. He suggested that parents ought to actively work to change this perception and to open the lines of communication with their children. Many studies have confirmed that teens who do not have any communication with their parents regarding the issues of sex and development tend to understand the silence negatively both in the short term as well as in adulthood (Snegroff, 2000). Regnerus (2007) argued, "Very few adolescents want their parents to say *nothing* to them about sex, and for those whose parents are silent on the topic, the result is usually pain and resentment" (p. 63).

A final hindrance of engagement in sexual conversation between parents and teens is the perceived lack of education and concrete information actually maintained. Because of their own lack of knowledge and the automatic connection made between education and sexual experimentation, parents are far less likely to offer discourse on the topic (Marriner, 1971). Marriner argued that without proper sexual education of their own, parents are unlikely to engage in sexual conversations with their children.

The content that parents do relay varies widely (Regnerus, 2007). The average parent is more likely to offer values or morally-based information over biological/anatomical information. Regnerus suggested the most frequent topic of discussion relates to the moral aspects of behavior. He stated, "Many parents believe that this is their primary responsibility: to convey normative—rather than informative—messages about sex" (p. 61). When religion is in the equation, for parents to talk about sex is in fact a discussion about values. He commented that non-religious parents better

understand the distinction between factual information and normative or subjective sexual values.

Media. When addressing the media and its effect on the sexual education of young people in the United States, there are three basic questions that must be addressed. First, how has the media changed over time? Second, how is it that it has such an effect on young people in the realm of sexuality? Third, what lessons are young people learning from movies, television, and written media? Having an awareness of what is being portrayed can explain the resulting anxieties.

Over the past 15 to 20 years, the media has become more and more permeating of society's ideals and influence over young people. The mass media can include, but is not limited to, television, music, magazines, movies, the Internet, texting, instant messaging, virtual video games, blogging sites such as MySpace and Facebook, video-sharing sites like You-Tube, and virtual reality sites like Second Life (Subrahmanyam & Greenfield, 2008). The ability to access information via the Internet, to develop social networks and connections through blogs and online journals, and to quickly and efficiently communicate through text messages has become the new medium of communication for adolescent generations over the past 2 decades. People can connect with communities and other individuals anywhere in the world through chat rooms, video messaging, and email. Movies and television shows are geared toward depicting "reality," while family driven sit-coms occupy fewer and fewer hours on the air (Brown & Keller, 2000). Due to this influx and change of technology, sexuality has equally exploded into these different media forums, providing adolescents with another, more unconventional, source of sexuality education.

The average American young person spends approximately 6 to 7 hours per day connected to some form of media (Brown & Keller, 2000). Unfortunately, the problem is the lack of responsibility the media takes regarding portrayals of positive sexuality. The balance of utilizing various media sources for good purposes, such as relieving social anxiety and offering educational information and resources, while simultaneously navigating around sexual predators and illicit web sites, offers new causes for researchers to further understand the impact it is having on teen life (Subrahmanyam & Greenfield 2008). The lack of health information, attention to safe sexual practices, or the discussion of abortion leaves American children with a skewed and inappropriate understanding of what sexuality is, how to understand their own, and how to engage in healthy sexual relationships (Brown & Kellar, 2000).

Sexuality, as displayed on television and in movies, has shifted from a modest and conservative framework to one that fully engages in sexual imagery, content, and exploitation. Contraceptive lessons are also few and far between. Only 3% of sex scenes portrayed on the air involve any apparent contraceptive use; furthermore, the lessons that sex can be safe and not have consequences is equally suggested (Regnerus, 2007, p. 137). Regarding the Internet and the availability of sexual content, filmmakers understand that pornography is generally the primary and often the only sexual education that teenagers receive (Regnerus, 2007, p. 59). The gravity of connecting with young people on this issue is more perilous now than ever. When they are only receiving highly dramatized, overly raw, and often misguided messages about sexuality through the media, the importance of further education to direct and caution youth should be established.

Peers. The presence and importance of peer relationships and in their sharing sexual information among themselves is a huge contribution to teens' understanding of sexuality. Teens consider their peers as a primary source of sexual information. Coleman (2007) found that approximately 40% of young people preferred friends as a primary source of sex information. The importance of a teen's social circle is considerable and acts as a strong influence in the attitudes and behaviors in which that individual engages. Whether relationships exist between same-age peers, older friends, or siblings, time and time again research has confirmed the continued presence and significance of shared information by friends and groups (Coleman, 2007; Kirby, 2001; Rodgers & Rowe, 1988).

Group norms and connection provide the initial topics for discourse regarding the prevalence of peer-shared sexual information. Kirby (2001) suggested that if teens spend time in a group that engages in risky sexual behaviors, then odds are that they, too, will experiment in such activities. Connectedness is the factor here. In groups where the general norm is opposed to sex outside of marriage, the individuals within that group will behave in accordance with the norm as a way to maintain connectedness. Regnerus (2007) discussed the effects that friends have on the sexual decision-making of each other by addressing three aspects of the structure of friend groups: *sociability*, *popularity*, and *density*.

Sociability is defined as the level of participation in activities with friends or a peer group. Density refers to how greatly members of a network know and interact with other members of the group – in other words, how interconnected the group is. Popularity is the quality of being well-liked or having high social status. When religiosity is brought

into the conversation, researchers see either a tightened adherence to the religious norms and sexual beliefs of the religious institution; conversely, if religious teens connect deeply with a more secular group, then they may alter their decision-making to better resemble the more liberal group norm. Again, the theme of connection and the importance of the group norm resurfaces as a strong factor regarding the choices of teens in sexual decision-making.

Finally, Kirby (2002) discussed the importance of a partner's feelings regarding contraception and sexual activity. Adolescents who are in relationships with partners who are like-minded regarding sexual choices (abstinence or contraception use) are more likely to maintain those values. When attitudes and beliefs are mismatched, however, risk-taking is more likely due to the effects of pressure.

## **Religion and Sexuality**

What in the research explains the impact of religion on both delivery as well as receptivity of comprehensive sexual education programs? Because religion and spirituality are complex aspects of life for the majority of adolescents who attest to some belief system, it is important to distinguish the different aspects of religiosity and their relationships to sexuality. First, the relationship between Christianity and sexuality must be explained. Where do teens get their understanding of religion; or better stated, what influences their faith experience? Also, sexual education as it is presented in the religious setting must be addressed. This new trend for religious-based sexual health programs provides an intriguing opportunity for values to be included into the comprehensive paradigm and a bridge built across the gap between comprehensive sexual education and

morals-based relational education (Boonstra, 2008; Green & Sollie, 1989; Powell & Jorgensen, 1985; Scales & Kirby, 1981).

# **Religious Sexual Education**

The concept of sexual education taught in the religious environment is one that is relatively new to Americans today. However, there is currently a trend toward discussing issues of sexuality at the local church level (Boonstra, 2008; Green & Sollie, 1989; Powell & Jorgenson, 1985; Scales & Kirby, 1981). To understand the lessons churches are attempting to offer and where they stand regarding comprehensive academic sexual education, one must examine the literature in a number of areas. First, there is a need to understand the Christian Church's approach to sexual education on a broader spectrum (Boonstra, 2008). Second, what is the research suggesting regarding the success of church-based sexual education programs (Green & Sollie, 1989; Powell & Jorgenson, 1985)? Third, what is the potential for these programs' long-term success in altering sexual attitudes and behaviors?

Religion and sexuality are not typically discussed in unison; however, the connection of the two is unquestionable. Regnerus (2007) suggested that both religion and sexuality access drives in humanity, "Sex concerns the pursuit of an intimate connection with another human being—to be known and to know someone else intensely. Religion concerns the need to make sense and meaning out of life, to connect with something or someone higher and purer than yourself..." (p. 6). Additionally, the experience of adolescents regarding sexuality and religion is often understated and quite complex. Approximately 84% of teenagers in the United States prescribe to some religious or spiritual ideology (Boonstra, 2008). As such, the way they experience

sexuality in reference to their religious beliefs affects their overall attitudes and behaviors long-term.

In the UK, more and more research has shown that improved information and education regarding sex and relationships is leading young people to better sexual health (Berne & Huberman, 2000). It is important, therefore, to address the types of sexual education, if any, that are being offered through religious organizations and mentors. There does seem to be a shift in the literature suggesting that religious organizations are attending to the sexual needs of their parishioners and attempting to develop programs that could be beneficial and educational.

In the United States, there appears to be movement at the national level toward development of comprehensive sexual education programs in church settings (Boonstra, 2008). In 2003, the Religious Institute on Sexual Morality, Justice, and Healing, an interfaith organization that advocates for sexual health education and justice, surveyed youth ministry departments across the nation and found that nearly 85% of respondents encouraged comprehensive sexual education (Boonstra, 2008). The problem now is the disconnect between ideals regarding sexual education and national policies with implementation at the local level. The issue of differing belief styles between and within Christian churches across the country creates a macro-problem in designing curricula that could be generalizable on the large scale.

Individual church doctrine, cultural differences, and level of conservative vs. liberal attitudes regarding the sexual education of young people would need to be considered as well (Powell, 1985). Sex education is often not part of a denomination's culture, and local congregations may not be expected to offer such programs (Boonstra,

2008). In addition, leaders in local congregations might be hesitant to offer comprehensive sex education out of fear of producing conflict both within congregations and communities at large. The importance of the entire system is often considered, thus presenting the dilemma of being positive and proactive regarding the importance of sexual education, yet feeling unable or incapable of developing such programs to implement (Boonstra, 2008). The suggestion is made that church leaders be encouraged and support systems established, such that they can advocate for these programs without fear of repercussions.

There is some movement in more progressive churches, however, to offer sexual education programs to their teens, which presents the question of whether they are successful. Powell and Jorgenson (1985) addressed the possible effectiveness of a non-school, church-based sexuality education program for high school age students. The study included the production of a church based sexual education program to be delivered to adolescents within the context of their home church setting. Parents and teens were involved in writing the program, and they decided together what was appropriate. A pretest, post-test control group was utilized to determine if the program was effective in three areas: sexual knowledge, clarity of personal values, and self-esteem. The researchers found that when tested against a control of similar young people, the program yielded positive results in the gaining of sexual knowledge as well as clarity of personal values; self-esteem was not affected. Furthermore, all but a few of the young people were incredibly satisfied with the information they received; and they encouraged the development of such a program for future young people.

Overall, there was a yearning for more information on topics ranging from anatomy and biology to knowing how to make sex more satisfying. Young Christians voiced a desire to know more about behavior, emotions, and relationships, sexually transmitted infections, and contraception (Coleman, 2007). As such, Faith-Activism (Boonstra, 2008) is on the rise, with programs such as Advocates for Youth and Planned Parenthood actively getting involved with local church organizations encouraging them to offer some type of education or, at the very least, become involved in the sexual education dialogue. Debra Haffner, director of the Religious Institute made this statement:

As religious leaders, we're committed to 'truth-telling'. Education that respects and empowers young people has more integrity than education based on incomplete information, fear, and shame. Programs that teach abstinence exclusively and withhold information about pregnancy and sexually transmitted disease prevention fail our young people. Scriptural and theological commitment to telling the truth calls for full and honest education. (as cited in Boonstra, 2008, p. 22)

Such statements suggest incredible potential for sexual education in the church atmosphere to become utilized and encouraged. Powell and Jorgensen (1985) argued that a church-based sex education program offers the advantages of providing more comprehensive sex education, the ability to examine personal values, and the opportunity to discuss personal responsibility and controversial issues.

### **Adolescent Sexual Development and Experience**

Religious influence on the issue of adolescent sexuality is highly complex and requires a semblance of delineation when assessing how to understand its effects.

Lefkowitz, Gillen, and Shearer (2004) addressed this question examining factors such as the number of times an individual attends religious services. This information did not provide insight to the particular religions' stance on sexual issues overall due to a disconnect between church attendance and belief adherence.

Regnerus (2007) addressed this complexity through conversations in preparation for his book, *Forbidden Fruit*. He developed six types of consequential relationships between religious experience and sexual behavior. First, he addressed *Intentional Religion*, which influences the individual's behavior through developed religious knowledge. This was identified through the use of religious language. This kind of religion is the easiest to emphasize because it is actively lived. Furthermore, there is an encouragement and generally positive embrace of core ideals by the individual and his or her home church congregation. Regnerus discussed the clear link between this religious experience and sexuality. Individuals who practiced this type of religiosity required teachings and directives that included relational and material resources, providing moral teachings and directives for self-control and personal virtue about how life should be lived.

Second is *Instrumental Religion* (Regnerus, 2007), where a faith tradition may influence an individual's behavior; but the influence is secondary to the use of secular reasoning in avoidance of undesirable behavioral consequence. This style of religion is shaped not only by the teachings and encouragement of the church directly, but also by

the young person's interests, preferences, and developed ideals. This is demonstrated through the medium of language wherein the individual may have particular religious beliefs or ideas about sexuality, but his or her reasoning regarding his or her attitudes may include little or no religious language whatsoever. Regnerus noted that the differences between instrumental and intentional typology are subtle and can often only be noted in the language. Furthermore, in these instances, sex may not be discussed in religious language because the lessons have not been imparted to them in such a fashion. The result is intermingling of religious values and upbringing with secular or practical reasoning for sexual decision-making.

Third is *Invisible Religion* (Regnerus, 2007), in which adolescent behavior is influenced by religion; however, an individual may not be aware of it and may even deny its relevance. This occurs most often when teens do not consider themselves *very religious*, even though they do obey religious rules and norms. This might be observed when discussing familial religious experience. Young people may attend church regularly, but they do not connect to the religion with any depth. In this way, the language is unused; however, their experience is colored with religious undertones affecting their feelings about sexuality or sexual experience.

Fourth is *Inconsistent Religion* (Regnerus, 2007), in which the religious beliefs do not influence the individual's behavior, even though he or she acknowledges its relevance and that it ought to influence one's actions. Regnerus offered three assumptions that might add to this inconsistency that are not only observed in adolescence but also well into adulthood. First, people do not always do what they want to do. Second, they may

not practice what they in fact believe. Third, religious expectations for actions tend to compete with other preferences and normative expectations (p. 198).

Fifth is *Irrelevant Religion* (Regnerus, 2007), in which there is no influence; additionally the individual does not claim to care about religion's relevance. Closely related although slightly different is *Irreligion* in which the individual is not religious and does not utilize religion as a modicum for behavioral influence. The religion is irrelevant because it does not exist. The difference between this system of religion and inconsistent religion is that here the individual does not care about what his or her belief system states. When adolescents do not believe that specific rules or teachings apply to them, they are experiencing irrelevant religion. They may be avid churchgoers who follow the lines of their faith consistently in other areas; however, regarding sexuality, the lines are ignored.

The question of influence discussed by Regnerus (2007) between religion and sexuality does not offer a clearly delineated answer. He stated, "The real challenge lies in documenting the type of influence that religion has on adolescent and adult behavior" (p. 202). The most common type of influence on adolescent sexual decision-making is instrumental, invisible, and irreligion; intentional religion appearing rarest throughout the general populous.

Cowden and Bradshaw (2007) explored religiosity related to sexual concerns and connected those concerns to positive and negative feelings about different sexual behaviors. The authors sampled young adults from urban universities in Washington, DC and North Carolina. Measures included the Attitudes Related to Sexual Concerns Scale (ASC) and other measures assessing religiosity. The ASC is highly regarded for this type

of research because it provides information about sexual self-understanding, body image, gender-role behavior, commitment, communication, masturbation, sex guilt, and performance anxiety. Results showed that extrinsic religiosity and intrinsic religiosity both related to sexual concerns as well as self-reported levels of sex guilt and masturbation discomfort (Cowden & Bradshaw, 2007, p. 20). Furthermore, virginity has been prized and become aspired throughout religious literature (Cowden & Bradshaw, 2007) and dogma. Many sexual behaviors are considered unclean and discouraged in many religious writings; as such, they have been transferred to current religious teaching (Cowden & Bradshaw, 2007; Laumann, Gagnon, Michael, & Michaels, 1994; Miracle, Miracle, & Baumeister, 2003). Last is the perceived restraint of some religious movements regarding sexual activities, which do not have reproductive goals at the heart (Pluhar, Frongillo, Stycos, & Dempster-McClain, 1998).

To understand the direct positive and negative relationships between religiosity and sexual initiation or debut, Hardy and Rafaelli (2003) sought to discover if one directly affects the other. The purpose of the study was not only to understand if religiosity affects the initiation of sexuality overall, but to also see if engagement in sexual relations affects religiosity and to measure a reciprocal relationship between the two. The results demonstrated that teens who reported higher levels of religiosity were less likely to engage in sexual activity or, minimally, to delay it. Furthermore, the authors found that transition to sexual activity between Time 1 and 2 of assessment did not directly predict later religiosity. The results supported the idea that higher religiosity might delay first sexual intercourse. In the end, the hypothesis that becoming sexually

active would negatively affect religiosity was not supported. Thus, there was no reciprocal relationship discovered between first sexual activity and religiosity.

# **Coping Strategies**

Attention must be paid to the research on coping to understand coping strategies, to determine the effects of such strategies, and to gain insight into how these effects might impact this particular population. This information is essential to understanding adolescent sexual behavior, be it engagement or abstinence. Because there is so little research into the particular experience and style of coping, it is important to note the full range of coping experiences. Furthermore, the intent is to address a customized cognitive coping style as a focus per Dr. Kevin Reimer's research at Azusa Pacific University. Issues such as thought suppression and affect regulation must be explored in the context of religious experience, possibly through modes such as prayer to best conceptualize and unravel an effective style of coping.

## **Thought Suppression**

The practice of thought suppression as a way to manage unwanted thoughts or images has been a common coping strategy for all types of cognitive frustrations. It is also a possible tool utilized by young Christians when they are faced with unwanted sexual thoughts, experiences, or potential behaviors. Wegner et al. (1987) did an extensive amount of research on the topic of thought suppression, the most conclusive study being the *White Bear Experiment*.

Wegner et al. (1987) analyzed the number of times undergraduate college students thought about a white bear when they were under instructions to suppress the idea. Two groups of students were tested. One group was instructed to first express their every

thought of a white bear for 5 minutes, then in a second 5-minute time frame, they were instructed to suppress any thoughts of a white bear. The second group was told to do the opposite for the same time periods. Suppression was never truly successful during either of the two conditions; however, Wegner et al. did find that those who were told to suppress first had higher incidents of the target thought. Wegner et al. also found that those who engaged in active suppression experienced an increase of target thoughts at later times, more so than when the thoughts were actively expressed. This presents a pivotal dilemma for the young Christian who is tortured with the issue of unwanted sexual thoughts or feelings. If he or she utilized this method of coping, attempting to "just not think about it," then he or she would actually experience a higher prevalence of the thoughts overall. They are then forced to seek other coping skills to manage such experiences.

Wegner et al. (1990) also studied the effects that thought suppression could have on emotions evoked by exciting thoughts. They utilized students from Trinity University in three different experiments to assess first if suppression of an exciting thought was more difficult than suppression of a benign one, and then if suppression is successfully accomplished, if the issue of "intrusion reactions" or feelings of bodily arousal due to intense emotions re-induced the thought. They found that the engagement with any exciting thought, either attempted suppression or expression, was more physically arousing than any benign thought. They also found that exciting thoughts tended to reinduce arousal over a period of 30 minutes even after the first thought suppression was attempted.

Based on the results of Wegner et al.'s (1990) study, it can be deduced that utilizing this form of coping would not only have conflicting effects, but also might make whatever was being avoided more stimulating. Wegner et al.'s results showed that the *skin conductance level* (SCL) deviated most from the baseline when the students were encouraged to think about sex more than any other target thought; and the effects were only observed during the suppression of the thought. The researchers found that the act of suppressing a thought is, in fact, itself initially exciting for the individual. There is a level of enjoyment or excitation in thinking about something that is *supposed* to be avoided. Furthermore, it creates a visceral emotive component. In real life situations, if an individual suppresses "affectively," then the thought is emotionally primed for future recurrence because it is unexpected and induces a stronger response. This creates the problem of never being able to fully vanquish unwanted thoughts or feelings because they are prepped to deliver a response that the body likes.

## **Affect Suppression**

Closely related to thought suppression is affect suppression, the suppression of feelings or emotions. Richards (2004) discussed the consequences that one might experience when suppressing emotions actively. She defined affect suppression as the process of actively trying to suppress an emotion as it is occurring, to present some façade of calmness to the world. Gross and John (2003) found those who suppress affect on a regular basis "experience themselves as inauthentic, misleading others about their true selves; they deal with stressful situations by masking their inner feelings and clamping down on their outward displays of emotion" (p. 360). The consequences of suppression include initial problems with memory recall, the inability to engage in

effective multi-tasking, and negative social interactions. Research from the cybernetic control model suggested "self-monitoring efforts are heightened among suppressors relative to control participants" (p. 132). Thus, those who suppress their thoughts and feelings are more likely to report thinking about their actual behavior and particularly the need to control it. This focus on the act of control can affect the memory of that moment elsewhere.

Another functional disruption related to affect suppression is the inability to do simultaneous tasks, including the inability to engage in social interaction adequately because attention is focused on excessive self-monitoring (Richards, 2004). In other words, while constantly attempting to regulate thoughts or emotions, the ability to interact and communicate is greatly diminished. Richards reported that the focus on suppression is linked to "reduced responsiveness, reduced complexity of utterances, increased rates of grammatical errors, and decreased verbal fluency" (p. 132).

The issue of reappraisal, or the act of preparing oneself for an oncoming emotion, is another important concept because it is different from active suppression. Reappraisal is just as effective for coping with emotion as suppression might be; however, it does not have the same consequences (Richards, 2004). The major difference between reappraisal and suppression is the action that the individual takes regarding avoidance and approach. The move toward reappraisal occurs early in an emotionally trying moment. The decision to change the perception of the event occurs, reducing the level of perceived stress in the equation. Gross and John (2003), in their studies on the differences between suppression and reappraisal, also found these differences to be substantially significant. They found that the use of reappraisal notably lowers negative impacts related to emotional adversity.

Furthermore, it offers protection against depressive symptoms. They argued, "Reappraisers should generally be more optimistic and are likely to have a greater sense of efficacy with respect to their immediate environments" (p. 359). Reappraisal is healthier in that the individual is changing his or her outlook, which puts less stress on the ability to cope and further aids in understanding the event.

## **Religious Actions as Coping Strategies**

**Prayer.** One particular example of Christian practice used as a coping mechanism in the presence of unwanted sexual thoughts or feelings is prayer. Bade and Cook (2008) examined the process of Christian prayer and addressed its potential as a coping mechanism. Prayer is defined by the authors as "thoughts, attitudes, and actions designed to express or experience connection to the sacred." Their goal was to understand this particular strategy and how to utilize it in the healthcare industry. Particular attention was paid throughout the work on the actual functions of prayer or various purposes for which prayers are used. Due to the study being more exploratory and discovery-oriented in nature, the authors provided no preconceived hypothesis for this project.

During the course of the study, Bade and Cook (2008) identified 3 bipolar dimensions that described particular areas or styles of prayer: (a) the *approach/avoidance continuum*, (b) the *internal/external focus*, and (c) *problem-solving engagement*. In the *avoidance/approach continuum*, coping activities are oriented toward or away from the perceived stressor. Participants' statements such as "strength to handle the situation" or "asking God to change or fix the situation" were utilized. The second dimension, the *internal or external focus*, offered the ability for individuals to ask for inner strength or calm vs. prayer for the concern of others. Bade and Cook argued:

Items toward the internal focus end of this dimension have a theme of managing a person's reaction to a personal problem, similarly to that described by emotion-focused coping. Items toward the external focus end of this dimension are in some ways similar to problem-focused coping, assuming that these prayer functions are oriented toward solving problems that people are facing. (p. 129)

Problem-solving engagement includes insight into the three styles of religious problem-solving: (a) a deferring style where the individual placed problem-solving action on God, waiting for Him to solve the problem without the direct involvement of said individual; (b) the self-directing style where the person takes action and moves through the process of problem-solving without God's aid in the coping strategy; and (c) the collaborative style where God and individual are actively involved in the coping strategy.

In addition to these three bipolar dimensions, three other coping factors emerged. The first included problem engagement where the focus was on altering or eliminating a problem. Second was the emotion-management factor, which pertained to managing distressing feelings toward a problem. The third factor of coping was avoidance, or the process of distancing the self or avoiding a problem entirely.

Community. Community is a subject in the Christian world that is often utilized as a coping strategy. The connection to church groups, youth ministries, and *accountability partners* is employed to maintain a level of commitment to whatever choices an individual may be making at that time. Emile Durkheim (as cited in Regnerus, 2007) found that "collective religiosity and common ritual practice provides individuals with both an obligation and a desire to conform to community norms" (p. 196). In the context of adolescent sexuality and sexual decision-making, the group is highly critical

when delineating normative behaviors that are appropriate and acceptable. Young people, teens in particular, are norms and group based. They care what others think of them and whether or not they will fit in with the collective group, whatever group that may be.

**Self-injurious behavior.** Other, more unconventional and potentially harmful coping strategies include self-injurious behaviors (SIB). Wagner and Rehfuss (2008) examined the relationship between self-injurious behaviors, sexual self-concept, and a conservative Christian upbringing. Self-injurious behavior was defined as the deliberate and direct destruction or change of body tissue without active suicidal intent, resulting in injury severe enough for tissue damage to occur (Wegner & Rehfuss, 2008). This could include actions such as cutting, picking at skin or hair, or the battery of one's own body. The authors interviewed three college-aged women ages 18 to 25 years, to discover if their history of SIB was somehow linked to their conservative childhoods and their experience of themselves as sexual beings. A lack of validation, feeling unaccepted or unloyable, and being unsure about their own sexual identities were the core hypotheses for this study. A semi-structured qualitative interview was conducted wherein women were encouraged to thoroughly answer open-ended questions about their history of SIB, to clarify their sexual self-concept, and to ponder whether they believed their Christian upbringing affected either of these two foci. The interviews were coded and assessed using the Consensual Qualitative Research approach, and core themes were delineated and examined further. The five themes included: (a) their Christian upbringings were connected to past feelings of unworthiness, (b) they experienced a negative or limited view of sexuality and sexual education within the home, (c) SIB was related to relational stress with the opposite sex, (d) they claimed that developing a personal spirituality

seemed to moderate SIB, and (e) the exploration and expression of personal sexuality seemed to moderate the SIB.

Wagner and Rehfuss (2008) presented another form of coping that is much less researched and understood. The issue of self-injurious behavior is one surrounded by controversy and shame and is rarely explored in therapy, much less in the research environment. Further study is required to better understand this particular method of coping, and it could be useful to generalize the samples used. Additionally, more diversity is required at this point. Lastly, because all three women came from conservative Christian homes, it would be helpful if women from more liberal Christian backgrounds, other religious upbringings, and non-religious homes were studied regarding the relationship between their sexual self-concept and SIBs.

## The Connection between Sexual Education, Religion, and Coping

Once a clear understanding of sex education and coping is established, their interaction must be considered. Where do these different sexual education venues affect or interact with coping mechanisms in day-to-day life? Does having more biological information equate to greater feelings of understanding about one's body and, in turn, prevent the necessity to engage in faulty or unsuccessful coping mechanisms? In the same way, does learning in the values-based worlds of religion and the home create greater imperative to restrain from sexual thoughts or feelings? How do these young people manage any cognitive dissonance that develops?

Cognitive dissonance is the imbalance or constant pull between two value positions. Society, the media, and often friends tell these young people that engagement in sexuality (attitudes and behaviors, masturbation through intercourse) is normal and

encouraged. Simultaneously, parents and faith communities remind young adults that entertaining their sexuality outside the marital union is wrong. Hopefully by addressing the lessons that are learned, this population can have a more positive and healthy experience of their sexuality, and further connect their education with the values backgrounds, and have less unnecessary anxiety and stress. Perhaps the opposite will occur, where certain lessons encourage fear and a denial of sexual experience, which may in fact create greater need for coping.

### **Summary**

Research has suggested a more positive outcome: that more comprehensive and positive values-based sexual education will reduce anxiety and stress related to sexuality for teens and young people. When religion is added to the mix, the importance of positive lessons, open dialogue, and engagement become necessary for more positive and confident attitudes and feelings toward sexuality, as well as greater understanding of choices made. The connection of peers, their influence, and position within the lives of each other also would change. If sexual education could become standardized both in the school system as well as in church settings, then the majority of information floating between friends might not be so illicit, erroneous, or negatively skewed. With a clear and thorough understanding of sexuality, accurate information can be shared. Furthermore, the proliferation of dramatized and overemphasized sexuality that is portrayed in the media can be seen as exactly that: dramatic and contrived. Perhaps a large part of the need for coping is the anxiety created when thinking that sex is "supposed" to feel and look like it is portrayed in movies, television, and pornography. These messages present

young people with standards that are nearly impossible to meet; thus, the clear and proper teaching of realistic sexuality could counter these polluted mixed messages.

### **CHAPTER 3**

#### **METHOD**

This chapter addresses the development of the study and the methods used to determine outcome effects. This study is a secondary analysis of archival data, and the development of the initial study is included herein. Participants are described, including demographics, quantity, and procedure for their involvement.

Then, the psychometric properties of each instrument are described. A Demographics Questionnaire was used to measure basic information such as age, ethnicity, and religious background. The Religious Commitment Inventory (RCI-10; Worthington et al., 2003) measured positive and negative attitudes toward religion and attendance to religious services. A Sexual Education Questionnaire allowed participants to answer questions about the extent of sexual education they had experienced across various sources. A Personal Choices and Attitudes Questionnaire was offered to measure participant attitudes and choices regarding sex and their sexuality, and Carver's (1997) Brief Cope assessed coping mechanisms used to manage unwanted sexual thoughts or feelings.

Third, the procedures for both the initial project from which the data was initially collected and the current study are described. Fourth, the statistical procedures used to manipulate the data, including an explanation of Exploratory Factor Analysis (EFA) and Multiple Regression are described.

Again, the present study is a secondary data analysis of an extramurally-funded research project studying sexual education, religious experience, and coping mechanisms. *Sexuality, Coping, and Moral Decision-Making in Christian Adolescents* was established (a) to focus on implicit and explicit sexual attitudes of Christian young adults and (b) to attempt to understand how these attitudes related to sexual behaviors and decision-making. The researchers also wanted to understand the effects of coping in this process, to further comprehend the underlying experience of Christian young people regarding their sexual experience. The difference between the two studies is the focus on the effects of varying types of sexual education specifically and how these experiences affect or influence coping methods or strategies positively or negatively compared to identified religiosity.

### **Participants**

Participants were college students recruited from schools affiliated with the Council of Christian Colleges & Universities, including Azusa Pacific University, Fuller Theological Seminary, and Point Loma Nazarene University. Additional samples were obtained from University of Texas at Austin and University of North Carolina, Chapel Hill. The data from UT at Austin was used as a controlled sample of students who may not religiously identify. Students were recruited for a randomized sample using a list of emails obtained by each school's Registrar. Each list came in blocks of 50 and continued until approximately 200 students had been emailed. A copy of the email sent to students is found in Appendix B. This recruitment procedure was consistent within each individual school.

Participants were between 18 and 35 years of age. Based on school demographics, the gender of the sample weighted toward women and was composed of mostly Caucasian non-Hispanic individuals, with smaller representations of Hispanic, African-American, and Asian/Pacific Islanders. Although this sample may not be generalized to the nation as a whole, it was representative of the schools sampled.

#### **Instruments**

All measures utilized in data collection were self-report and completed online. The entire task took approximately 15 to 25 minutes to complete. The questionnaires to which each participant responded covered religious commitment, religious service attendance, sexual attitudes and personal choice, sexual education, and coping strategies for sexual thoughts and feelings. Participants completed these surveys through Project Implicit via the University of Virginia, which allowed secure access over the web. Participants were provided a generic login and password to access the website (i.e., the login and password were identical for everyone). The login and password also prevented individuals from randomly participating while allowing students to remain anonymous.

### **Demographics Questionnaire**

The first measure was a basic demographic characteristics questionnaire, eliciting information such as gender, ethnicity, and age. Researchers also inquired about relationship status, where options including single or married served as a manipulation check to verify schools were recruiting non-married students.

## **Religious Commitment Inventory**

The RCI-10 was used to assess positive and negative attitudes toward religion. It consisted of 26 items, answered via Likert scale, where participants could choose from

five potential answers. The answers ranged 1 through 5, where 1 = Not at all true of me, 3 = Moderately true of me, and 5 = Totally true of me. Worthington et al. (2003) reported strong internal consistency ( $\alpha = .93$ ) for the full scale as well as for the subscales: Intrapersonal Religious Commitment (.92) and Interpersonal Religious Commitment (.87). Furthermore, high correlation exists between these two subscales, r(154) = .72, p < .001. Worthington et al. also reported high construct validity. Participants were asked about their attendance at religious services in addition to the RCI-10. This information was used as a baseline to establish religiously-oriented students from non-religious students. Having clear and distinguished sample groups allowed greater clarity in results particular to religious undergrads.

#### **Sexual Education**

A sexual education questionnaire was developed for participants to answer questions regarding their exposure to factually based sexual education. They were asked about venues where sexual education had been offered (home, school, church, peers, media). They also answered whether or not they had received helpful sexual education from their faith communities, including how to handle unwanted sexual thoughts or feelings. The questionnaire was comprised of three Likert format items with six subquestions, where the participant could answer each question to six different possible venues. These were answered based on a 1 to 7 scale, where 1 = Not at all factual, 4 = Somewhat factual, and 7 = Completely factual.

## Personal Choice/Attitudes

The *Personal choice/attitudes* measure was comprised of 25 Likert form items.

Participants answered questions about their perception of choice in terms of their

sexuality. Questions also addressed their attitudes toward sex and their individual sexuality. Answer choices were ranked on a 1 to 7 scale, where 1 = *strongly disagrees*, 4 = *neither agree nor disagree*, and a score of 7 = *strongly agree*.

### **Emotional Coping**

The Brief Cope (Carver, 1997) assessed coping. Participants were asked to report on the coping mechanisms used to manage unwanted sexual thoughts or images. The *Brief Cope* is a 28-item measure that examines 14 different scales of coping strategies with Cronbach's alphas for each individual subscale reported as follows: Active coping (.68), Planning (.73), Positive Reframing (.64), Acceptance (.57), Humor (.73), Religion (.82), Using Emotional Support (.71), Using Instrumental Support (.64), Self-Distraction (.71), Denial (.54), Venting (.50), Substance Use (.90), Behavioral Disengagement (.65), and Self-Blame (.69). It should be noted that the scales contain only two items each; and despite this, their reliabilities all meet or exceed the value of .50, which is regarded as minimally acceptable (Nunnally, 1978). Factor analysis determined the relevance of each subscale for this particular study.

#### **Procedure**

A random sample of approximately 200 students from five schools were emailed an invitation to be a part of the *Sexuality, Coping, and Moral Decision-Making in Christian Adolescents* study. The email included a URL to the study's webpage. The first page of the website included the informed consent, where, if they chose to continue, then they would click an "I agree" button. The participants went on to complete the list of measures. Upon finishing the tasks, the participants were thanked and offered the chance to provide an email address to be included in a lottery. The lottery offered the participants

a 20% chance of winning \$20 and a 1% chance of winning \$100. The lottery was established in advance by randomly selecting (without replacement) 40 numbers from 1-200 and then randomly selecting two numbers out of 1-200. As student emails were received, they were included in a list numbered 1-200. The first set of randomly selected 40 numbers identified students who received \$20; the two randomly selected numbers identified students who received \$100.

As the *Sexuality, Coping, and Moral Decision-Making in Christian Adolescents* study was ongoing during the production and development of the current analysis, literature review and preliminary hypotheses were developed prior to the completion of the primary project. For the current study, a thorough review of the literature highlighted the extensive attitudes, affects, and employment of sexual education in the school systems, home environment, church organizations, between peers, and within the media. Literature was also researched for information regarding common coping mechanisms that may be used in general, as well as particularly with young religious individuals. The role that religion may play in developing a need for coping was also researched.

# **Data Analysis**

The purpose of the current study was to understand how differential aspects of sexual education affect sexual coping in religious undergraduate students. To initially determine an answer, independent and dependent variables, and sample groups were identified.

The process to clearly distinguish population samples arose from obtaining a mean on the Religious Commitment Inventory (RCI-10). By establishing a baseline for religiosity and attending to individuals with scores one standard deviation above and

below the mean, sample groups were developed. One standard deviation offered the level of difference needed to fully compare different belief systems and thus clarify how religious influence may or may not affect an individual's experience of sexual education related to coping. This study hypothesized identifying distinctions in the style and perceived need to cope in the religious sample more often and with more intensity than the non-religious sample.

Next, analysis focused on distinguishing the independent and dependent variables (DV). The independent variables consisted of different types and venues of sexual education, as well as impact of personal religious experience. Education items included academic/comprehensive sexual education, sexual lessons taught by parents, sexual education obtained from church, media sexual messages, and shared sexual information among peers.

The dependent variables (DV) were more difficult to clearly identify initially. Although *Coping* was the basic dependent variable of the research question, further exploratory analysis was required to clarify which coping factors would be specifically addressed. The measure used to assess coping was Carver's *Brief Cope* which offers 14 different subscales of coping including *Active coping, Planning, Positive reframe, Acceptance, Humor, Religion, Using emotional support, Using instrumental support, Self-distraction, Denial, Venting, Substance use, Behavioral disengagement, and Self-blame. Not all of these subscales were relevant to the given sample. Furthermore, Mertler and Vannatta (2010) suggested that large numbers of dependent variables are not recommended when running multivariate ANOVAs. If there were a large number of DVs, then reducing the overall number of variables would allow more efficient analysis.* 

In *exploratory factor analysis*, the goal is to describe and summarize data by grouping variables that are correlated (Mertler & Vannatta, 2010, p. 241). With the grouping of these subscales into more concise dependent variables, *Multiple Regression* was used to analyze the data set. Multiple Regression was the best statistic to use for this study because it provided the ability to examine more than one DV at a time, as well as simultaneous effects of multiple IVs on multiple DVs. Additionally, the strength of the identified relationships was addressed based on how much variance was accounted for and the significance level of the findings.

Considering the process of analyses, the following hypotheses were provided.

First, using Factor Analysis, what underlying structure exists among the variables of parental, academic, peer, pop culture, and religious education in addition to numerous coping styles and variables? Secondly, to what extent does sexual education differentially predict sexual coping when compared with religious belief systems and practices. Lastly, it is expected that more factually based sexual education, will lend to more positive coping strategies, while more socially informed or informal sexual education will result in poor or negative coping strategies.

#### **CHAPTER 4**

#### RESULTS

This chapter presents the study findings in three stages: Exploratory Factor

Analysis (EFA) and reliability statistics. Second, the initial screening and cleaning

process are described as well as the process of creating the variable composites. Third, a

description is given of the Multiple Regression Analysis for each dependent variable, and

Correlation Coefficients are provided for all variables.

## **Exploratory Factor Analysis and Reliability Statistics**

## **Coping**

The initial steps toward data analysis began with a basic screen of all data included in the data set using Exploratory Factor Analysis and Reliability. The protocol originally included 141 Likert scaled questions, including qualitative response opportunities. This protocol was provided to students from 5 CCCU schools, University of Texas at Austin, and the University of North Carolina, Chapel Hill. Because the data set is considered archival for the purposes of this analysis, the initial development, organization, and primary screen are not described here. Secondary screening and basic cleaning analysis did occur following retrieval of the data set.

It was interesting that when initially examining the data, it was clear that a significant number of items were missing. Furthermore, the particular scores that were missing remained consistent throughout the set, meaning a large number of individuals

did not respond to specific questions across the population pool. Although this finding was qualitatively interesting, it did not cause issue with the current study, as most of these items were behaviorally based (i.e., related to specific sex acts or drug/alcohol use) and were not included in the data analysis. Alternatively, items that were included for the purposes of this study were addressed after Exploratory Factor Analysis was conducted.

Exploratory Factor Analysis (EFA) provided an opportunity to address all variables in the particular interest areas (i.e. Religiosity, Sexual Education, and Coping) and which items interacted most significantly with each other. As the protocol in its entirety included 141 individual items, and many of these items addressed a number of different themes, EFA allowed clear and related factors (groups) to be established. By running this statistic, the full protocol was narrowed into a far more manageable data set with groups of items that provided a foundation for each independent and dependent variable.

Each EFA included initial Eigenvalues, assessed the percentage of variance, and the extraction sums of squared loadings for each question. Inclusion into a particular factor was decided based on the total percentage of variance, where exclusion began when a major drop-off occurred between items. A rotated component varimax matrix was also included in the EFA, which clearly delineated separate factors within the item collection.

All components had Eigenvalues greater than 1, which is the most widely accepted criterion developed in 1960 by Kaiser, now known as *Kaiser's Rule* (Mertler & Vannatta, 2010, p. 234). To address the cut-off points for each factor, only components that accounted for approximately 70% of total variability were retained (see Table 1).

Additionally, any item that double-loaded on more than one factor was removed. For the topic of Coping, initial analysis revealed a number of major factors. The first, described as *Distraction*, included items such as "Concentrating efforts to do something about them," "Turn to school to take my mind off them," and "Come up with a strategy." The second factor encompassed *Reliance on Others*, including "Get advice from others, "Get emotional support," and "Get comfort from talking to someone." Third, a factor that described choices regarding *Thought and Action* included items like "Taking action to make the regret better," "Pray or meditate," and "Think hard about steps to take." A fourth factor focused on *Positive Coping* and included items such as "Make jokes" and "Make fun of the situation". A last factor within the data set described *Hopelessness or Resignation*, and included two items: "Accept reality of thoughts" and "Learn to live with it."

Following the initial EFA for the Coping variables, reliability analyses were run on all six factors. Cronbach's Alpha, which offers a measure of reliability or internal consistency for the factor, and the percentage of excluded variables within the factor delineated which would be included for further analysis. The percentage excluded indicates the number of respondents who did not answer the question, where the total number of participants was 584. The *Distraction* factor presented with approximately 51% excluded data as well as a Cronbach's Alpha ( $\alpha$ ) of .73. The *Reliance on Others* factor included 64% excluded with and  $\alpha$  =.81. *Thought and Action* was one of the factors responded to most, with an exclusion rating of only 38% and  $\alpha$  = .65, following the exclusion of one of four initial items. The item removed from the factor was "I blame myself for what happened" and although it was consistent with the factor, its relative

Table 1

Exploratory Factor Model for Coping Composites

	_	Factor Loading			
Item		Factor 1	Factor 2	Factor 3	Factor 4
Distra	ction				
1.	Concentrate efforts to do something about them	.798			
2.	Turn to school to take mind off	.739			
3.	Come up with strategy	.708			
Relian	ce on Others				
1.	Get advice from others		.804		
2.	Get emotional support		.759		
3.	Get comfort from talking to someone		.737		
4.	Let unpleasant feelings escape		.520		
Thoug	ht and Action				
1.	Take action to make regret better			.686	
2.	Pray or meditate			.645	
3.	Think hard about steps to take			.624	
Positi <sup>-</sup>	ve Reframe				
1.	Make jokes				.789
2.	Make fun of the situation				.723
% of va	riance explained	23.99	9.77	8.72	4.605

strength was quite weak. As a result, it was removed, where following the factor exhibited stronger results. The *Positive Reframe* factor reported an exclusion of 64% with an  $\alpha$  = .65. Lastly, the *Hopelessness/Resignation* factor revealed exclusion of almost 65% with an  $\alpha$  = .55. As a result of lower reliability compared to the other factors, this particular set was dropped from further analysis. Analysis proceeded with a Coping DV of four major factors (Table 1).

#### **Sexual Education**

Next, all items related to sexual education were addressed. Although ideally, the Sex Education items would have undergone EFA too, few items were allotted to obtain strong individual factors. With only 14 available items to utilize from the set, reliability analysis offered the opportunity to determine which items were most closely related to one another and, thus, how best they could be grouped as independent variables. A number of reliability analyses were run using different combinations of items, such that the strongest combination would create the final factors.

Each of the reliability analyses is reported as follows: The three items focused on parental education rendered 4% exclusion rating and  $\alpha$  = .45. The three items focused on religious education rendered 5% exclusion rating with an  $\alpha$  = .25. The three items focused on pop culture education rendered 4.5% exclusion with an  $\alpha$  = .23. The three items focused on peer-based sex education rendered 4.5% exclusion with an  $\alpha$  = .38. Lastly, each of the three school/academic based items rendered 4.5% exclusion with an  $\alpha$  = .42.

Because the initial reliability analyses proved so minimal, varying combinations of the different educational types were analyzed based on qualitative hypotheses of relatedness. First, a combination of peer-based and pop culture-based educational items was combined, rendering 4.5% exclusion with an  $\alpha$  = .55. Second, a combination of religious and school-based education resulted in 5% exclusion and  $\alpha$  = .45. Third, school and peer education was combined rendering 4.5% exclusion and  $\alpha$  = .44. Fourth, a combination of parental and religious education was analyzed rendering a 5.1% exclusion and  $\alpha$  = .49.

Lastly, because there was such variance between the different individual items and the combination of different educational models, some of the different three item groups were analyzed in a "step-wise" fashion, where one of the items was removed from the item analysis to consider how that particular item affected the overall internal consistency of the other two. The academic/school component was concluded that the item addressed the "extensiveness" of school education played a minimal role in the overall model. When removed from the factor, the internal consistency of the educational component revealed  $\alpha = .52$ . With this information, two final analyses were completed; one focused on *Moral and Factually-Based Education*, including the three items on both the religious and parental components and the two related variables of the school/academic based education. This analysis rendered minimal exclusion of 5.1% with  $\alpha = .58$ . When completing the Factor Analysis for this *Morally and Factually-Based* Education, two items exhibited Eigenvalues lower than the majority of the others: extent of parental education, and extent of religious education. These two items were included in the final factor based on the Cronbach's alpha rendered in reliability analyses. When included in the model, the factor's CA was higher than when the model was tested without. The final analysis included each of the three items of the pop culture and peerbased educational components, which rendered  $\alpha = .55$ , and the second major factor, Socially Informed education. A final confirmatory factor analysis was run to establish consistency of the individual items within the two defined factors, yielding consistent results (see Table 2).

# Religiosity

For the topic of religiosity, EFA rendered two factors. The first, described as *Religious Beliefs and Practice*, included items such as "My religious beliefs lie behind my whole approach to life," and "I often read about my faith." The second factor, described as *Values*, included value based statements, such as "I am ethical," "I live by clear principles," and "I have strong beliefs." Because the religiosity construct was based on a particular measure, the RCI-10, internal reliability provided a clean and relatively stable list of items. The Cronbach's Alpha for the *Religious Beliefs and Practice* factor was .96, while the *Values* factor  $\alpha = .86$ . Each of the two factors is presented in Table 3.

Table 2

Confirmatory Factor Analysis for Sexual Education

	Factor Loading		
Item	Factor 1	Factor 2	
Moral and Fact Based Sex Education			
Type of parental sexual education	.615		
Type of academic sexual education	.593		
Factual academic sexual education	.529		
Factual parental sexual education	.526		
Type of religious sexual education	.508		
Factual religious sexual education	.420		
How extensive parental sexual education is	.384		
How extensive religious sexual education is	.326		
Socially Informed Sex Education			
Factual pop culture sex education		.580	
How extensive peer sex education is		.555	
Type of pop culture sex education		.526	
Factual peer sexual education		.505	
Type of peer sex education		.482	
How extensive pop culture sex education is		.405	
% of variance explained	16.41	12.98	

Table 3

Factor Analysis for Religiosity

	Factor	Loading
Item	Factor 1	Factor 2
Beliefs and Practice		
My religious beliefs lie behind my whole approach to life	.878	
I work in activities of religious affiliation	.870	
Religious beliefs influence all dealings in life	.858	
I spend time trying to grow in my faith	.849	
Important to spend time trying to grow in my faith	.845	
I enjoy spending time with my religious community	.838	
Religion answers meaning of life questions	.816	
Frequency of attendance at religious services	.805	
I often read about my faith	.751	
I make financial contributions	.749	
I am informed and have influence	.722	
Values		
I am ethical		.819
I live by principles		.771
I have clear values		.760
I keep high standards		.759
I have strong beliefs		.733
I am law-abiding		.666
% of variance explained	50.534	15.883

Findings are consistent with previous research assessing the internal consistency of the RCI-10. Worthington et al. (2003) indicated "two factors with eigenvalues greater than 1.0 were found, which accounted for 72% of total item variance" (p. 87).

# **Descriptives**

Descriptive analyses were run on each of the major themes of the data set including Religiosity, Sexual Education, and Coping Behaviors. Each descriptive provided the mean, standard deviation, skewness, and/or kurtosis of each major item group. Furthermore, additional frequencies were run to address the extent of missing data

in each of the major factors. Given significant exclusion of certain items or a fair amount of missing data, consultation was sought from Ying Jiang, Ph.D. of Azusa Pacific University. Dr. Jiang adjusted the data set using the List-Wise Deletion Method, where an entire record is excluded from an analysis if a single record is missing. By working the sample in this way, any participant who did not respond to all items was removed from the distribution, creating new total N value for each factor. Although each factor's N changed, the overall strength of the factor increased because the amount of excluded data was removed

The purpose of screening the data at this point in analysis, rather than prior to identifying the factors, was to address the items that would actually be used. Preceding this point, there were far more items included in the analysis than actually included in the final data set. Had the List-Wise Deletion been run before identifying the factors, more participants than necessary might have been lost, decreasing the overall sample. By identifying which items are relevant to the study and determining what factors best capture the information attempting to be understood, fewer participants could be eliminated, resulting in a larger sample.

The following is a report of the total number of participants within each factor:

Meaning/Beliefs and Practice: 562; Values: 564; Moral and Factually Based Education:

554; Socially Informed Education: 558; Distraction for coping: 283; Reliance on Others

for coping: 431; Thought and Action for coping: 361; and Positive Reframe for coping:

432. A noted change following this application was the deletion of the Distraction coping
factor, due to the limited number of respondents. Furthermore, a qualitative observation
following the final list of factors for the dependent variable of coping suggested a social

bias toward the more positive or socially acceptable answer. Each factor within the Coping theme was comprised of significant strength on predominantly positive responses.

Following receipt of the cleaned data, the proposed factors were organized into cohesive variables. This occurred by "summing" each item within the factor to create a single variable to use in the Multiple Regression Analysis. Frequencies were run to address the composition and reliability of each composite variable, as well as Confirmatory Factor Analysis to test each variable for latent or underlying processes. Each variable was found to be consistent.

### **Multiple Regression**

Before addressing the outcomes of each regression analysis, it is important to note a significant change in the research question and further analysis. Initially, this analysis was designed to address comparative differences between religious and non-religious respondents. This would occur by taking the overall score of the respondents' RCI-10, and address the threshold outlined in Worthington et al. (2003) for the full-scale score; one standard deviation above and below the norm could classify religious vs. non-religious sub groups. It is interesting that when the total score was found for these particular questions, a vast majority of the population scored above the norm reported, with a minimal population scoring below the anticipated standard deviation. As a result, the comparative analysis portion of the study was removed.

Multiple Regression (MR) was run for each of the three coping factors, which served as the dependent variables. Regression analysis procedures offer the purpose of developing an equation that can be used for predicting values on some DV for all

members of a particular population. Basically stated, the line of best fit was sought between a number of independent variables and one dependent variable, such that the presence of a significant predictive relationship between them could be ascertained. In this study, each MR analysis was run by including each of the four main independent variables: *Beliefs and Practice, Values, Moral and Factually Based Education*, and *Socially Informed Education*.

The first analysis addressed the dependent variable of *Reliance on Others*. This MR was conducted to determine which independent variable (*Beliefs and Practice; Values; Morals and Fact Based; Socially Informed*) was the best predictor of *Reliance on Others* for sexual coping. Regression results indicated one significant linear relationship (*Beliefs and Practice*) that predicted relying on others,  $R^2 = .039$ , adjusted  $R^2 = .030$ , F = 4.285, p < .001. The model accounted for 3.9% of variance for this DV (Table 4).

The second analysis addressed the relationship with each of the same four variables on the dependent variable of Thought and Action. Regression results similarly indicated a significant relationship between the variable of Beliefs and Practice with the

Table 4

Multiple Regression Analysis of Religious and Education Factors on Reliance on Others

Variable	В	SE	В	t	p
Values	027	.044	033	618	.537
Beliefs and Practice*	.049	.012	.209	3.971	.000
Socially Informed	.001	.031	.001	.028	.978
Morals and Facts	003	.020	007	139	.889
Model Summary	R	$R^2$	$adj R^2$		
,	.197	.039	.030		

*Note.* \*Significant finding p < .01

DV, where  $R^2 = .191$ , adjusted  $R^2 = .182$ , F = 20.97, p < .001. The model accounted for 19.1% of variance (Table 5).

A third analysis addressed the relationship one last time with each of the IVs on the dependent variable of Positive Reframe. Regression results indicated a single relationship between Socially Informed sexual education on the DV of Positive Reframe, where R2 = .024, adjusted R2 = .015, F = 2.63, p < .05. This model accounted for 2.4% of variance in relying on others (Table 6).

Table 5

Multiple Regression Analysis of Religious and Education Factors on Thought and Action

Variable	В	SE	В	t	p
Values	.036	.034	.055	1.038	.300
Beliefs and Practice*	.073	.010	.393	7.487	.000
Socially Informed	021	.025	040	837	.403
Morals and Facts	.018	.015	.059	1.187	.236
Model Summary	R	$R^2$	adj R <sup>2</sup>		
	.437	.191	.182		

*Note.* \*Significant finding p < .01

Table 6

Multiple Regression Analysis of Religious and Education Factors on Positive Reframe

Variable	В	SE	В	t	p
** 1	022	001	0.02	1.540	100
Values	033	.021	083	-1.548	.122
Beliefs and Practice	005	.006	046	867	.385
Socially Informed*	.033	.015	.109	2.261	.024
Morals and Facts	.022	.009	.012	.241	.810
Model Summary	R	$R^2$	adj R <sup>2</sup>		
J	.155	.024	.015		

*Note.* \*Significant finding at p < .05

Lastly, a correlation matrix offered a clearly delineated picture of which variables were correlated either positively or negatively with each other at either the .01 or .05 significance level. *Religious Values* was positively correlated at the p < .01 level with *Beliefs and Practice, Morals and Factually Based Education*, and *Thoughts and Action Coping*. Religious Values was also correlated at the p < .05 level in the negative direction with *Positive Reframes*. *Beliefs and Practice* correlated with *Religious Values, Factually and Morally Based Education*, and *Reliance on Others* all at the p < .01 significance level. *Socially Informed Education* correlated with *Positive Reframe* at the p < .05 level, and *Morally/Factually based education* correlated with *Values* and *Beliefs and Practice* at the p < .01 level, as well as with *Thought and Action* at the p < .05 significance level (Tables 7 and 8).

### **Summary**

To address the proposed effects in relation to the preconceived hypotheses, the original proposal was revisited and the correlation adapted accordingly. The three proposals included: *Hypothesis 1: Using Factor Analysis, what underlying structure* exists among the variables of parental, academic, peer, pop culture, and religious education in addition to numerous coping styles and variables? Hypothesis 2: To what extent does sexual education differentially predict sexual coping when compared with religious belief systems and practices? Hypothesis 3: More factually based sexual education will lead to more positive coping strategies, while more socially informed or informal sexual education will result in poor or negative coping strategies.

To address H1, there was indeed structure among the different venues of sexual education as the participants responded. Demonstrated through a number of descriptive

Table 7

Descriptive Statistics of All Variables

	M	SD	N
Values	25.44	3.69	567
Beliefs and Practice	34.96	13.04	567
Socially Informed Ed.	30.13	4.84	559
Moral and Factual Ed.	35.75	7.41	559
Reliance on Others	4.80	2.99	431
Thought and Action	6.56	2.45	361
Positive Reframe	2.37	1.43	432

Table 8

Inter-Variable Correlation

	1	2	3	4	5	6	7
1. Values	1						
2. Beliefs and Practice	. 396**	1					
3. Socially Informed Ed.	.062	061	1				
4. Morals and Facts	.182**	.162**	.070	1			
5. Reliance on Others	.052	.194**	016	.018	1		
6. Thought and Action	.228**	.428**	065	.132*	.233**	1	
7. Positive Reframe	097*	088	.109*	007	.497**	010	1

*Note.* \*\*Correlation is significant at p < .01. \*Correlation is significant at p < .05.

analyses as well as confirmatory factor analyses, there was more internal consistency between variables when the items that comprised them were alike in two major ways. First, *type, extent,* and *factual* education received from parents, school, and their religious institutions were all stronger together than separated individually by venue. Equally, *type, extent,* and *factual* education received from peers and the media appeared to be more consistent together than they were experienced individually, based on participant response styles. Although this was surprising, the merge of the three venues that

comprised the *Factual and Morally Based* group, the polarity with the *Socially Informed* venues is qualitatively consistent with the current literature.

To address the second hypothesis of the comparison between religion and sexual education, it was gently surprising yet equally confirming of the overwhelming impact of upbringing and core values. First, there was the initial requirement of adjusting the scope from comparing a religious to non-religious sample, as participants appeared to be a more homogeneous group overall. The limited number of respondents whose RCI-10 scores were below the standard deviation threshold did not allow such a comparison. As a result, religion was identified as an independent variable impacting coping style, just as sexual education was. Although the results were surprising, it appeared as though two of the three strongest predictive relationships occurred with *Beliefs and Practice* of religion with the DV coping (*Thought and Action* and *Reliance on Others*). Although there were correlations between the educational variables and coping variables, they were not predictive in the same fashion, with the one exception of *Socially Informed* education on *Positive Reframe* coping.

The last hypothesis involved the issue of comprehensive fact based education vs. socially informed sexually education on positive and negative coping styles.

Unfortunately, the extent of this particular hypothesis could not be addressed based on the response styles of participants. Due to a generally "positive" skew to the coping items, there was not enough consistency or a high enough response to the items related to negative coping strategies, such as *distracting* or *using substances to deal with it.* Perhaps with either a larger sample or different participant pool, results would have allowed a broader range of coping behaviors and, thus, clearer predictive relationships.

### **CHAPTER 5**

#### DISCUSSION

This study sought to address the significance of comprehensive sexual education on the sexual coping practices of young Christian adults. Results indicated a significant basal relationship between longstanding religious beliefs and practices and sexual coping. Study outcomes provided insight into the interaction between sexual education, religious beliefs, and values with the utilization of coping strategies.

# **Hypothesis 1**

Hypothesis 1: *Using Factor Analysis, what underlying structure exists among the variables of parental, academic, peer, pop culture, and religious education in addition to numerous coping styles and variables?* The first hypothesis addressed the key question of internal validity and consistency regarding the grouping of educational milieus. Although it was originally expected that items from the same educational "families" would hold together (academic, parental, religious, pop culture, and peer items would group together), factor analytic results demonstrated stronger relationships when items were grouped based on moral and factual, or social underpinnings. This finding informs a systemic approach to learning, where sexually relevant information is provided across multiple venues throughout an adolescent's life.

Unlike other educational topics, sexual education includes a spectrum of varied issues ranging from biological facts, subjective morals and values, personal beliefs, cultural or social attitudes, and individual experiences. To assume each educational venue offers only a specific type of instruction would be misleading and a misunderstanding of this complex learning system. For example, what is transmitted from parent to child varied based on religious beliefs (Regnerus, 2007), culture/ethnicity (Sneed, 2000), and perceived need of the adolescent. Parents may provide some anatomical or biological information; but they are more likely to provide relationship advice, moral attitudes regarding sexual behavior, and negative consequences such as STIs or pregnancy (Meschke et al. 2000; O'Donnell et al. 2007; Regnerus, 2007; Sneed, 2000). This initial learning is later supplemented in academic or church based venues, where additional biological information, contraceptive options, biblical moral imperatives, relationship advice, and even coping skills are taught. This systemic interaction occurs for socially informed curricula as well, where popular culture and information sharing among peers intersect, resulting in lessons of sexual behavior, relationship advice, socially based sexual attitudes, and experiential anecdotes. The result is a comprehensive educational approach, where multiple venues impart similar yet distinct sexual lessons for which adolescents are tasked to internalize.

Present study findings are consistent with the literature regarding a general grouping process whereby parents, teachers, and church programs offer information that is more moral/factual in nature (Boonstra, 2008; Kissell-Ito, 2007; Powell & Jorgensen 1985; Regnerus, 2007; Sneed, 2000), while the information attained from peers and pop culture is generally more experiential, casual, and less goal oriented—where avoidance of

STD or pregnancy and the maintenance of virginity/purity/morality are less important (Brown & Keller, 2000; Coleman, 2007; Kirby, 2001; Regnerus, 2007; Rodgers & Rowe, 1988).

The morally and factually based sexual education composite, comprised of facts obtained from educators or mentors, in addition to morally focused issues based on religious beliefs or family values, comprised the first education factor. The grouping of items that demonstrated learning from parents, church settings, and academic settings shared a more directional and informational bend.

In the United States, there are a multitude of approaches that seek to reduce adolescent sexual risk-taking (Kirby, 2002, p. 51), whereby the main points relevant to these types of education are "approach" and "reduce." Perhaps some of the significant factors that separate *morally/factually* based education from *socially informed* are the goals of "reducing" risk taking behavior, limiting unsafe sexual activity, and encouraging healthy sexual development and identity. Education gained from parents, church mentors, and educators is often geared toward either intervention or positive influence, addressing subjects like HIV and contraception (Epstein & Ward, 2007; Kirby, 2002), encouraging abstinence (O'Donnell et al., 2007), developing sexual values (de Ruyter, & Spiecker, 2008; Hoge et al. 1982), and offering insight regarding healthy relationships and positive self-identity (Regnerus, 2007). Although a distinct correlation of these venues has not been directly discussed in the literature, more times than not, the consistent goal-oriented focus, attention to intervention, and consideration for values are evident among them.

Equally, the variable addressing *socially informed* sexual education demonstrated consistency with the literature, as the type, extent, and information shared are particular

in their own right. Epstein and Ward (2008) indicated that young males consistently name peers and friends as one of their most frequent sources of sexual information, and Lefkowitz et al. (2004) found that dating was a topic discussed most frequently, followed by sexual behaviors and feelings. Epstein and Ward qualitatively found that young men report talking about sex with their peers, telling sexual jokes, engaging in teasing, boasting about accomplishments, and sharing sexual stories. Throughout the literature addressing peer and media based sexual education, this approach to sexual discussion is seen again and again, where information is shared and distributed based on emotional, attitudinal, experiential, and group interest. Regardless of content, the overall context of shared sexual education in social situations is relatively casual in nature; and the factor analytic findings of the current study affirmed this relationship.

# **Hypothesis 2**

The second hypothesis, Sexual education will play a more predictive role in sexual coping when compared to religious belief systems and practices of the participants, demonstrated a reversed finding. Although the importance of sexual education for young people has been established time and again throughout the literature, (Kirby, 2001, 2002; Regnerus, 2007; Somers & Surmann, 2005), the impact of morally/factually-based education on coping was not significant for the population sample. Instead, a significant relationship was identified between the independent variable of religious beliefs/practice with sexual coping; specifically, thought and action as well as reliance on others. To find that deeper religious beliefs carried more statistical weight on coping practices than educational interventions was initially surprising. However, results make clear a fundamental and rather basal argument: core values, religious beliefs, and spiritual

practices deeply influence how people cope with life more so than do academics (Ano & Vasconcelles, 2008; Aten & Leach, 2009; Pargament, Koenig, & Perez, 2000; Pargament, Smith, Koenig, & Perez, 1998).

### **Coping Development**

Family Psychology posits that "human behavior occurs within a contextual matrix of individual, interpersonal, and environmental or macrosystemic factors where time, complexity, and reciprocity demonstrate fluidity and perpetual opportunity for growth and adaptation" (Stanton, 2009). People are complex, with multiple factors influencing interpersonal development, moral and values growth, behavior, and belief systems. How people cope with stress is developed through a series of learned responses throughout the lifespan, across systemic factors, and through the incorporation of values, spiritual belief systems, and meaning. Lazarus and Folkman (1984) previously defined coping as a transactional process between an individual and his or her environment, much like the fluid interaction among systemic factors in Family Psychology.

During the process of coping, a person assesses the relationship between his or her situation and the environment, then addresses the relevance of the experience and perceived threats, loss, or benefits of the situation (Lazarus & Folkman, 1984). Religion and faith serve a significantly important function by providing insight and meaning regarding existence (Aten & Leach, 2009) and also skills and resources (Pargament & Krumrei, 2009) during times of struggle. Although education can enhance a knowledge base and provide insight, rarely does it offer the necessary skills to manage sexuality. Thus, the identified relationship between *religious beliefs and practices* with coping

reminds one of the foundational lessons, social values, and concrete skills needed in a world that stresses people.

To address the regression findings more specifically, one must acknowledge what kinds of coping practices are informed by religiosity and ask why these particular practices rather than others were influenced. It should be noted that although results indicated consistency with the current literature, namely that religiosity and coping are correlated, the majority of studies addressing this relationship do so in the context of specific "religious coping" practices, where religious practices such as prayer are used as coping strategies to relieve stress (Ano & Vasconcelles, 2008; Bjork & Thurman, 2007; Lee, 2007, Pargament, 1997). As a result, study findings provide insight to a research gap where clarity is warranted in how and why religiosity informs non-religious coping or what is influential in the place of religion when religiosity is not a factor.

Religious beliefs and practice on thought and action. Regression analyses yielded two significant findings related to religiosity. First, *religious belief and practice* was significantly related to the coping DV *thought and action*. *Thought and action* as a composite variable was comprised of items such as "taking action to make regret better" "pray or meditate" and "think hard about steps to take." Two different coping methods are presented: The first is the use of a religious activity ("pray or meditate"), and the second is a more general approach ("taking action to make regret better" and "think hard about steps to take").

Both the broad relationship between religiosity and *thought and action* and, more specifically, the use of religious methodology as a means of coping, demonstrates consistency with the work of Pargament et al. (1998, 2000) as well as Ano and

Vasconcelles (2005) who addressed the significance of religious practices on "psychological adjustment." Across a number of studies and meta-analyses, these authors identified a consistent relationship between positive or negative religious actions as coping strategies and the result of related positive or negative psychological reactions across different stressful situations (Ano & Vasconcelles, 2005). Additionally, they established the process where individuals of faith use religious coping mechanisms to serve two simple and consistent purposes: to provide stress relief and to offer meaning and/or support. As indicated, the use of "prayer or meditation" as endorsed by the sample, is well documented across the literature. To what extent are coping practices that encourage relief of stress but not religious in nature impacted by religiosity?

This other component, the use of practices that encourage problem-solving or stress resolution ("taking action to make regret better, thinking hard about steps to take") may be better accounted for as a process of finding meaning, purpose, and hope which can strengthen individuals during their suffering (Krok, 2008). This indicates an internal motivation for active or task-oriented coping practices, be they religious acts or not.

Hill and Pargament (2003) provided three insights into why religiosity or spirituality can act as an internal motivator for people. First, individuals might perceive many aspects of life, including physical and psychological health, as sacred in significance to their character and/or moral directives. As a result, they may treat those dimensions of life with respect and care, wherein this sense of sacredness represents a vital source of strength, meaning, and coping which is used during periods of stress (Krok, 2008; Pargament et al., 1997). For the study population, managing issues about sexuality, a topic that affects both the mind and the body, the importance placed upon

keeping the self "sacred" may be a very active and motivating factor, encouraging taskoriented coping processes. Religion can also influence young people by "increasing their
competence in skills and knowledge that contribute to enhancing their well-being and
improving their life" (Smith, 20003, p. 22). These can include leadership skills, coping
skills, and cultural capital (Regnerus, 2007, p. 44), which are identified by Holt (1998) as
distinctive skills, knowledge, and practices objectified in particular cultural/religious
credentials.

A second motivating factor noted by Pargament (1997) was a sense of ultimate goals or destinations in life. If young people believe God is at work, guiding their lives, or perhaps will someday provide a marital partner or family, then they may experience internal motivation to actively cope with sexuality, serving as a means to an end. In cases where sexual delay or avoidance is the goal and preserving sexual acts for marriage, the necessity for coping serves the function of stress relief and management when avoiding the overall issue or, more specifically, engagement in sexual behaviors. If an individual has experienced negative consequences, whether physical (STDs, pregnancy), emotional (rejection, humiliation, disappointment), or familial/social (family disapproval, social discomfort) due to previous sexual behaviors, then coping may serve the function of making meaning of the consequences, learning to grow given difficult circumstances, or managing consistent or repetitive difficult social/familial interactions. Any combination or derivation of these events could motivate basic coping processes among the sample. What is observed, however, is the underlying process of motivation and life guidance that is inherently connected to faith and religious belief systems (Aten & Leach, 2009; Krok, 2008; Pargament, 1997; Regnerus, 2007).

Religious beliefs and practice on reliance on others. The importance of social support and interpersonal interaction within religious contexts cannot be understated. Regnerus (2007) indicated, "Local religious congregations are the most popular voluntary organization in America and often provide adherents with readily available social networks" (p. 43). By encouraging fellowship with others, religious communities may offer members the benefits of social ties and increased social support to aid in the coping process of mental and physical stress (George, Ellison, & Larson, 2002; Hill & Butter, 1995; Rogers, 1996; Sasaki & Kim, 2011; Seybold & Hill, 2001). Given the relevance of social interactions and support in religious communities, it is not surprising that the coping variable reliance on others was so strongly related to religious beliefs and practice. The importance of community and social support, coupled with learned trust and safety of such relationships, offers a readily available coping resource. As described by Benner (1998) in his work Care of Souls: Revisioning Christian Nurture and Counsel, "the church protects and affirms spiritual growth and is an indispensable part of its nurture and celebration. Acts of corporate worship have the potential to be profoundly powerful resources for soul care" (p. 107).

## Religion as a Method of Meaning-Making

Although the underlying hypothesis for each of this study's findings has been discussed, to truly address the broader relationship between religiosity and coping, there must be discussion regarding the process of meaning-making as a broad motivator for coping. According to Ano and Vasconcelles (2005), a key motivator for religious coping is making meaning and seeking support during a stressful event. Across the findings, the process of coping with the topic of sexuality has assumed a positive and directional

approach as indicated by the coping strategies endorsed and identified. By utilizing thought and action and seeking reliance on others, young Christian adults are able to pursue meaning and understanding regarding their sexuality and develop a sense of control regarding the role of sexuality in their lives.

A significant body of literature exists regarding the importance of religion on meaning-making and coping processes. Park and Folkman (1997) developed an integrated meaning-making model of coping with two distinguished levels of meaning. First, they identified *global meaning*, which included the global beliefs and goals of an individual. Global beliefs included the basic internal cognitive structures or ways people experience their reality and how they approach beliefs about their personal world (Park, 2005). In this study, one might think about how the sample population approaches sexuality in relation to their faith system, their biblical knowledge and interpretation, as well as social ideals and expectations within their faith communities. Described by Regnerus (2007) and Smith (2003), the development of such global beliefs may stem from moral directives, spiritual experiences, and role models, all of which come together to develop a moral order. These global beliefs and goals provide motivation regarding how one should live his or her life and also appraised meaning to the events he or she experiences as stressful or difficult (Emmons, 2005; Park, 2005). Religion offers coping aimed at making meaning of a difficult event through benevolent religious appraisal, religious forgiveness, seeking of religious support, and sometimes spiritual discontent (Pargament, 1997).

### **Hypothesis 3**

The third hypothesis: *More factually based sexual education will lend to more positive coping strategies, while more socially informed or informal sexual education will result in poor or negative coping strategies* could not be addressed due to insufficient data. As described in the results section, skew in the coping response set did not allow comparison of positive and negative coping processes. This broad response style by the population where primarily positive coping strategies were endorsed could be due to a number of factors.

First is the lack of negative coping skills such as utilization of substances, self-harm behaviors, or risky sexual decision-making. In the initial data set, it was evident that data was missing; and as the data were investigated, it became clear there seemed to be a pattern, where the missing data correlated significantly with negative or socially "inappropriate" responses. On the whole, the coping data had a more positive spin, where items such as "I criticize myself", "Use alcohol or drugs to get through," and "Give up trying to deal" were generally ignored or "passed" during the completion of the measures. Many items such as these were missing responses throughout the data set. It is possible that social desirability bias occurred, where those responding provided information that reflected what would be considered socially acceptable in their communities or among their social norm.

Paulhus (1984) provided insight into two types of social desirability bias, where *self-deception* refers to the tendency to give biased but honestly-held descriptions of oneself, although *other-deception* posits an overly favorable self-description given purposefully to a researcher. Social desirability bias is often referenced in research

specifically related to religion and sex, as described by Regnerus; and while behavior cannot be explained by social desirability effects, it can bias estimates of religious influence (Regnerus, 2007, p. 55). The lack of a usable sample of negative coping strategies negated the ability to accurately measure a difference based on education or religious influence.

A second potential explanation for the positive skew in the data could be a lack of specifically negative religious coping items in the study questionnaires. According to Ano and Vasconcelles (2005), there tends to be a relationship between negative religious coping and adjustment to stress. It would be interesting to have access to a specific measure that addresses both positive and negative religious coping strategies and compare that to stress-adjustment related to sexuality. The authors' findings demonstrated a positive relationship between negative religious coping and negative psychological adjustment, indicating those who engaged in negative religious coping strategies experiencing more anxiety, distress, and depression. The authors suggested this relationship exists because people who utilize negative religious coping may experience their faith or religion as a burden during stressful times. This relationship was not addressed in the present study and presents potential direction for future research. One might wonder if young Christians experience their faith as burdensome or condemning, specifically regarding sexuality, and to develop some insight into this stressor might be telling.

A third and final explanation considers a positive reappraisal of stressful stimuli through meaning-making processes. Park (2005) identified two ways in which religion is involved in changing the meaning of stressful situations. First, religion helps the

individual see the positive aspects that have come from the stressful situation; second, it provides a means to make more benign reattributions to stressful stimuli. "Positive reinterpretation is a very common, and adaptive, coping response that involves construing the situation in a positive way and identifying the benefits that may follow from a stressful encounter" (Carver, Scheier, & Weintraub, 1989; Park, 2005, p. 712). Park further discussed how many religious traditions emphasize the necessity and possibly good outcomes of enduring the difficulties in life. Although it is a very simple concept, there may be parallels for the study population. If there is a more positive spin on stressors and the potential outcomes, then why not posit the same positive approach to the interim of the stressor and the outcome? Positive coping styles and approaches may actually be consistent with the practices of these young adults who have developed, on the whole, a more positive outlook on the frustrations and challenges of life.

### **Clinical Implications**

As Regnerus (2007) found, "The key story of religious influence on adolescent sexual decision making is typically best captured by religiosity" (p. 203); and this study found the same influence of religion on actual coping practices. At this point, the remaining question is what to do with this finding. Since the 1990s, there has been a positive upsurge in mental health professionals' view of religion and spirituality; and the foci on research and clinical training has continued to increase through the present (Aten & Leach, 2009). Clinicians are in an opportune position to incorporate knowledge of human behavior and stress management, in addition to training in religious and spiritual diversity, to offer assistance to academic and church systems as well as the clients (adolescents, couples, families, and individuals) seen in therapy.

### **Educational Interventions**

One significant recommendation emerging from the study concerns the implementation of sexual education programs that provide not only factual sexual information, but also values related to positive sexual decision-making, healthy sexuality, and a focus on sexual identity development. Although the findings of this study demonstrated stronger relationships between religiosity and coping directly, the third finding where *socially informed education* predicts *positive reframe coping* must not be disregarded.

Socially informed education, which is typically more experiential, offers an important advantage affording young adults the freedom to laugh at potentially stressful material. Academic education, if taught in an open-minded and de-stigmatized format, could also offer factual information that lends to safe and healthy sexuality as well as influence a positive sexual outlook. By imparting a more accepting sexual attitude, dissonance may be avoided in favor of healthy sexual identity within the context of morally accepted Christian ethics.

One way to achieve this goal could include formulating sexual education curricula to be taught within religious houses and or biblical studies programs. Churches are already offering the basics for coping with stress (Ano & Vasconcelles, 2005), such as offering practical skills like seeking community, prayer, and release to God. By adding the necessary discussion about sexuality, both factual and moral, they offer additional insight specifically for sexual identity development and better sexual decision-making. According to Boonstra (2008), this process of incorporating sexual education with the church context has been underway since 2003; however, there continues to be

inconsistency and fear regarding how to develop age appropriate curricula that will be accepted by parents and appreciated by students. If trained in religiously oriented programs, then clinicians can learn about the impact and importance of religious beliefs, morals, values, and identity formation within the context of a specific spiritual formation. Equally equipped to work within systems and function as mediators, educators, and program developers, therapists are well suited to aid their local religious houses in developing such a course and facilitating the process of moving it through administration, congregation, parents, and finally to the ears of students.

Kissell-Ito (2007) stated, "Religious institutions offer a unique and valuable role in sexuality education as a life-long process that includes theological reflection on the formation and intersection of beliefs, sexual practice, respect for ones body, and relationships" (p. 95). She offered specific resources for the development of such programs including the *Sexuality Information and Education Council of the United States* (SIECUS), an Internet resource that also offers materials in hard copy. The Religious Institute on Sexual Morality, Justice and Healing is another Internet resource that provides an annotated bibliography of sexuality curriculum for faith communities. Kissell-Ito (2007) recommended the use of content like *Breaking the Silence-Preventing the Sexual Abuse of Minors*, a DVD produced by the Diocese of Orange, CA, or a PBS movie, *The Education of Shelby Knox* (p. 95). Each of these resources offers a place to start in the educational process that is neither vulgar nor amoral, but rather factual, informative, and potentially aligned with religious contexts.

Another way to address aiding these young people in the discovery of a healthy sexual identity is to encourage the adults and mentors in their lives to speak up on the

topic. Although moral/factual education did not appear to impact coping in the current study, the literature consistently identified the importance of parents and mentors as preferred and influential sources of sexual discussion and education (Kirby 2001; Meschke et al., 2000; Powell, 2008; Regnerus, 2007; Somers & Surmann, 2005). Providing family therapy, acting as academic consultants, developing faith oriented sexed programs, and supporting parents and teachers in sexual conversation with teens are ways clinicians, sociologists, and spiritual mentors can be actively involved in the transmission of positive sexual education.

#### **Clinical Interventions**

Perhaps one of the simplest recommendations following the results of this study is to utilize faith when intervening with emerging adults in clinical settings. As indicated in the results and demonstrated throughout the literature, the use of religion and faith in coping with psychological distress is useful for young adults. Utilizing and building on skills that have been developing since childhood allow deeper growth. To adequately do this, one must be curious about the role of religion and faith in clients' understanding of the world and as it pertains to one's core identity. Familiarizing oneself with the work of religious researchers like Drs. Regnerus and Reimer can provide additional skills and awareness to better understand how young people use religion and the extent to which it permeates their decision-making, coping, and guiding principles for their lives. Clinicians enter the therapeutic relationship with theory and orientation as a guide, but by also utilizing a client's faith and integrating his or her belief system, one can better conceptualize one's needs and the treatment required to help.

One way to approach the integration of spirituality and religion in therapy is by addressing clients' unique belief systems as aspects of culture and diversity. In their work, A Peaceable Psychology, Dueck and Reimer (2009) addressed the depth and interaction between psychology and cultural diversity, ethnic and spiritual alike. The authors challenged the relatively "apolitical and religiously aloof" aspects of typical "North American Psychology," arguing that "a peaceable psychology privileges the suffering of the poor and the language they use to understand it" (Dueck & Reimer, 2009, p. 18). Although the book is written from the perspective of a Christian psychological approach, the larger theme of cultural competence and curiosity holds across theories and orientations. To work with a religious or spiritual clientele, clinicians are tasked with working collaboratively within their clients' worldview and with a curious and open regard for their culture and upbringing. To fully understand identity, upbringing, resources, coping style, problem-solving, and a basic approach to life, the therapist must be curious regarding what lies beneath the problems presented during intake and open to utilizing the client's background in developing awareness and growth. The particular method for conceptualization or treatment planning stems from a clinician's theoretical orientation; however, the integration of culture and diversity should always be incorporated.

Aten and Leach (2009) addressed the importance and utilization of spirituality at multiple levels of the therapeutic process, from the initial self-awareness of the therapist to clinical intake, case conceptualization, and treatment planning throughout the therapeutic relationship. Much of the work happens with the therapist, where exploration and development of awareness are crucial to ethical and sound therapeutic work.

Understanding one's own biases, beliefs, and triggers can aid in the developed awareness of countertransference reactions, avoid pathologizing spirituality and religion of the client, and avoid minimizing the significance of religion in a client's life (Aten & Leach, 2009, p. 54). As implied through results, the impact of religious beliefs and values may account for a vast majority of clients' approach to their world, impact how they cope in it, and be relevant to problem-solving and coping. To enter the therapeutic alliance with understanding and openness of oneself as well as eagerness for the client will enhance the client-therapist rapport and facilitate safety and understanding. Utilizing a spiritual genogram or autobiography are two ways a therapist can begin the process of self-exploration and spiritual awareness.

Noting spirituality during clinical intake is another opportunity to address religiosity in the therapeutic context. Leach, Aten, Wade, and Hernandez (2009) demonstrated the importance of the clinical interview as the first exposure clients have to the counseling process, and it often determines whether they return for additional sessions (p. 75). This is a time where a client may be sensitive to the level of safety regarding his or her spiritual or cultural background by attuning to non-verbal cues when discussing religious beliefs, as well as the level of interest the therapist shows in his or her belief system. The clinical interview offers opportunities for explicit and implicit inquiry of a client's faith background. Explicit inquiry might include questions that directly attend to religious beliefs and practice (e.g. "Do you have any religious or spiritual beliefs that may be important to discuss during counseling?). Implicit inquiry is far less direct, yet provides space for a client to impart information about his or her spirituality for additional follow-up. Questions might include, "How do you cope with

stress in your life" or "Where do you find comfort in times of stress?" Related to these questions of meaning, coping, and morality is exploring the client's current experiences of the congruence between their values or ideals and their lifestyle (Richards & Bergin, 2005).

Regarding case conceptualization and treatment planning, while many therapists consciously and deliberately assess cultural worldviews related to race, ethnicity, and gender, a deliberate focus on religiosity is often negated. In reality, religiosity is central to the meaning systems or orienting systems of most clients (Bergin, 1991); and it would behoove any clinician to give credence to such an important aspect of identity and core values. Park and Slattery (2009) suggested approaching the roles of religion from a meaning-making viewpoint, where the fundamental ideas are compatible with and can enrich case conceptualizations from a number of different theoretical orientations (p. 139). Religious belief systems offer clients a sense of stability and control in a world that might feel unpredictable or uncontrollable, providing meaning to many of life's most difficult questions including pain, suffering, death, and tragedy (Pargament, 1997). To access both the explicit beliefs and the more value-based ideals such as benevolence, gratitude, community, and peace can also lend to problem-solving and meaning-making of everyday struggles, goal achievement, and interpersonal growth and satisfaction (Park & Slattery, 2009, p.127).

Regarding an orientation or setting-based approach, the focus is on meaning-making and the integration of the client's spirituality in relation to the broader psychological question. As with any theoretical orientation, exploring religious beliefs can be integrated and utilized in conceptualization per the orientation's structure. In CBT,

one might inquire about how the client's religious system impacts thoughts about mental or physical illness, how the client learned to cope with struggles, and how having a community of believers has aided during times of crisis or struggle. How the client has developed core beliefs about self as one "loved by God" can provide significant meaning to his or her sense of self-confidence, feelings of worth, and willingness to seek and/or receive help. The same significance on spiritual background and development can be integrated in any number of other orientations if the therapist is willing and able to recognize it.

This study's results are noteworthy in addressing the integration of religion in clinical treatment planning; a relationship has been noted between religious beliefs and practice with coping practices that focus on thought and action as well as relying on others. Although this study did not utilize a clinical sample, much of the stress and psychological discomfort associated with difficulties inherent in developing sexuality may be relevant to an outpatient therapy client. As a result, addressing issues such as social support and problem-solving skills; seeking education or answers to difficult questions; or, more significantly, learning to manage unplanned pregnancy, sexually transmitted infections, or mediating difficult sexual relationships could all be addressed in a therapeutic setting.

Although treatment planning often varies based on theoretical orientation, diagnosis, and the client's personal needs and goals, general foci such as identity, skill development, awareness development, and increasing social support are universal clinical concepts related to treatment goals. Zinnbauer and Barrett (2009) suggested spiritual difficulties and strengths may be relevant to clinical work at several levels including the

individual, social, cultural, and global levels. By interacting with the client's spiritual background in addition to the rich multidimensional being (cultural factors, individual factors, interpersonal patterns, environmental factors), developing interventions and utilizing strengths and resources that provide practical benefits can make therapy even more meaningful and comprehensive.

In addition to meeting the needs of young people directly, parents must be educated on the importance of interacting with their adolescents. Clinicians might receive referrals to work with teens struggling with sexuality, risky behaviors, or disobedience in the home; however, without facilitating new patterns of discussion between parents and teens, adequate growth may not be significant. By offering one's competence to encourage flexibility and relationship development within families, skills are introduced to both the adult and teen, allowing more depth and safety, indirectly facilitating a family culture or dynamic that allows more open discussion of topics such as sexuality and/or identity development.

#### Limitations

Fortunately, the study from which this data was collected was well organized, offered a significant population sample, and included a large number of topics from which to choose for further investigation. One initial limitation, however, was the relatively homogeneous population sample, which may not be generalizable to a national population. To fully understand the impact of religiosity on sexuality and coping, a larger sample including more diverse demographics ethnically, religiously, socioeconomically, and politically could present a slightly different picture regarding the extent to which religion affects sexual development, as well as what coping strategies are used and how

they may differ between religious and non-religious folks. Perhaps with additional time and/or resources an even larger sampling might be available in the future.

Second, there were adjustments made to the coping measures prior to sampling. Originally, the coping data was to be collected via Carver's *Brief Cope* measure. However, to better address the issue of religious coping, this measure was modified with items added and removed to better meet the original examiner's research goals. By not using a completely original coping measure, the breadth of coping factors was limited. Additionally, the coping measure used did not fully address the issues of religious coping as deeply or with as much scope as possible. It would have been interesting to have had access to a specifically religious coping measure with strength and validity.

A final limitation for this study was the lack of qualitative data for inclusion. Although qualitative responses were invited in the original protocol, the coding and analysis of that data went beyond the time capability allowed for this project. Youth researchers, including Regnerus, rely significantly on interviews to obtain greater depth, furnishing a more complete picture of the research question. When addressing significantly personal beliefs, identity development, values, and faith, Likert scales miss some of the deeper meaning affiliated with complex topics such as faith and sexuality.

#### **Future Research**

There are a number of additional matters related to this study and its outcomes that warrant future investigation. First is to address the relevance of *public* vs. *private* religiosity (Regnerus, 2007) on coping efficiency and sexual stress management. To refresh, *public religiosity* refers to the outward practices and "protocols" that comprise religious affiliation or adherence. It tends to affect outcomes of development such as

future educational success. *Private religiosity* refers to internalizing beliefs and value systems, such that risky or inappropriate behaviors like drug use and delinquency are morally avoided.

The ritual practice of rising early and going to church commits one to a habit that fosters the discipline also needed for academic success. But if the religious belief system is never internalized or grounded in cognitive identity, then regular church attendance alone will fail to motivate the resistance of the more transitory opportunities such as having sex. (Regnerus, 2007, p. 47)

When paired, religious involvement and internalization can be powerful, comprehensive motivators. The lingering question is how *private* or *public religiosity* differs in the practical utilization of coping mechanisms and management of stress related to sexual issues.

A second matter pertains to the religious coping styles outlined in Pargament's (1997) and Ano and Vasconcelles's (2005) work, where significant relationships were noted between positive and negative religious coping and positive or negative psychological adjustment (psychological outcomes to religiously oriented efforts employed to manage the negative impact of stressful situations; Ano & Vasconcelles, 2005, p. 464). Due to both the positive skew and a lack of pertinent data required to address this question, a new study utilizing additional measures for religiosity, religious coping, and sexual coping could be interesting. Perhaps by addressing the question of negative religious coping practices directly, a clearer picture can be obtained of where young people are struggling to cope, providing better insight in how to help them.

# **Final Thoughts**

The goal of this study was to provide evidence demonstrating that increased comprehensive sexual education and open lines of communication in the home and church would positively affect Christian adolescents' capacity for coping. This educational system would decrease stress, increase understanding, and provide skills to manage an ever-increasing sexualized society. Alternatively, the results of the study demonstrated the dominance of values, morals, and skill sets developed through the medium of religious influence and upbringing. The relevance of adolescents' faith and value systems penetrate their psychological stores, offering safety, community, skills, and characteristics on which they rely during a relatively uncomfortable period of development, as well as while under sexual distress.

In thinking critically about the relationships observed during the current study as well as throughout the literature, one is faced with a number of implications. First, as found in the current project, education does not independently or appreciably impact coping. Furthermore, comprehensive or factually-based education does not influence any particular kind of coping, be it thought, behavior, or distraction. Religion, however, clearly offers direct relationships and skills from which coping is implemented in a generally positive way. *Beliefs and practice* increased the capacity for individuals to rely on others, find solace in their communities, and seek support during times of distress. *Beliefs and practice* also influenced thought and action coping skills, supporting the process of seeking answers and utilizing the practice of prayer or meditation to manage unpleasant feelings or behaviors.

To wonder why education does not affect coping directly is met with three simple answers: (a) Education does not directly necessitate coping (education may not cause distress or make a person engage in a negative behavior, etc.); (b) education does not offer specific or concrete coping skills or mechanisms, practically speaking (coping skills training, offer sexual support groups, etc.); and (c) education does not provide *meaning* to the *experience* of sexual development. Although facts, biology, normalization, protection, and de-stigmatization are all offered in a comprehensive classroom, helping a young person understand the deeper, more personal aspects of sex, intimacy, and interpersonal vulnerability may be missing.

Alternatively, religious practice offers both moral imperatives for guiding behavior and to concrete actions and skills to utilize during times of struggle or psychological distress. The actions of prayer, seeking advice from a pastor or mentor, obtaining emotional support from peers, and relying on a community for guidance are all practical strategies for managing stress. Additionally, the values and identity focus found in religious and spiritual faith systems offer a platform to address the meanings associated with sexuality. Although there is clearly room for expansion, as identified by the classroom of undergrads referenced in Chapter 2, at least churches are addressing the deeper meanings they place on sexual relationships and marital union.

Finally, to identify the antecedents for coping necessity, one is left with psychological and cognitive dissonance and consequences of behavior. When values and life experiences are incongruent or when negative consequences to a risky behavior are leveled, young people experience distress and require coping to manage. In thinking how to best serve this population, both religion and education might be more successful when

utilized in tandem rather than at odds with one another. Educating young people about their bodies, their hormones, and the moral and emotional components of sex can be done even more successfully when their spiritual and religious values/beliefs are also incorporated. Families, churches, and schools ought to work together to offer the most comprehensive education and coping skill sets available: increasing knowledge, building skills, and encouraging sexual development and behavior that is intentional rather than impulsive, safe instead of risky, and imbued with meaning.

What differentiates American young people from those in other nations is the social discontent and taboo laden by society on sexuality overall. By offering education, understanding, and community, as well as assuming the process, acts, and meaning of sex, leaders might be able to decrease sexual "acting out," increase the complexity and depth of intimacy, and ultimately aid in the reclamation of sex in the United States.

#### REFERENCES

- Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology*, *61*, 461-480. doi:10.1002/jclp.20049
- Aten, J. D., & Leach, M. M. (2009). A primer on spirituality and mental health. In J. D. Aten & M. M. Leach (Eds.), *Spirituality and the therapeutic process: A comprehensive resource from intake to termination* (pp. 9-24). Washington, DC: American Psychological Association.
- Bade, M., & Cook, S. (2008). Functions of Christian prayer in the coping process.

  \*\*Journal for the Scientific Study of Religion, 47(1), 123-133. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Benner, D. G. (1998). *Care of souls: Revisioning Christian nurture and counsel*. Grand Rapids, MI: Baker Books.
- Bergin, A. E. (1991). Values and religious issues in psychotherapy and mental health. *American Psychologist*, *46*, 394-403. doi:10.1037/0003-066X.46.4.394
- Berne, L. A., & Huberman, B. K. (2000). Lessons learned: European approaches to adolescent sexual behavior and responsibility. *Journal of Sex Education and Therapy*, 25(2 & 3), 189-199. Retrieved from http://web.ebscohost.com/ehost/detail

- Bjork, J. P., & Thurman, J. W. (1997). Negative life events, patterns of positive and negative religious coping, and psychological functioning. *Journal for the Scientific Study of Religion*, *46*(2), 159-167. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Boonstra, H. D. (2008, Winter). Matter of faith: Support for comprehensive sex education among faith-based organizations. *Guttmacher Policy Review*, *1*(1), 17-22.

  Retrieved from http://www.guttmacher.org/sections/index.php?page=policy
- Brown, J. D., & Keller, S. N. (2000). Can the mass media be healthy sex educators?

  Family Planning Perspectives; The Guttmacher Institute, 32(5), 225-226.

  Retrieved from www.guttmacher.org/pubs/journals/3225500.html
- Carver, C. S. (1997). You want to measure coping but your protocol is too long: Consider the brief cope. *International Journal of Behavioral Medicine, 4*(1), 92-100.

  Retrieved from http://www.ssc.wisc.edu/wlsresearch/pilot/P01
  R01 info/aging mind/Aging AppB18 BriefCopeScale.pdf
- Carver, C. (2006). Approach, avoidance, and the self-regulation of affect and action. *Motivation and Emotion*, 30, 105-110. doi:10.1007/s11031-006-9044-7
- Carver, C., Scheier, M., & Weintraub, J. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267-283. doi:0022-3514/89/0075
- Centers for Disease Control and Prevention, National Survey of Family Growth. (2011).

  Std/HIV risk. Retrieved from

  http://www.cdc.gov/nchs/nsfg/abc\_list\_s.htm#stdhivrisk

- Coleman, L. (2007). Preferences towards sex education and information from a religiously diverse sample of young people. *Health Education*, *108*(1), 72-91. doi:10.1108/09654280810842148
- Cowden, C. R., & Bradshaw, S. D. (2007). Religiosity and sexual concerns. *International Journal of Sexual Health*, 19(1), 15-23. doi:10.1300/J514v19n01\_03
- de Ruyter, D. J., & Spiecker, B. (2008). Sex education and ideals. *Sex Education*, 8(2), 201-210. doi:10.1080/14681810801981225
- Dueck, A., & Reimer, K. (2009). *A peaceable psychology: Christian therapy in a world of many cultures*. Grand Rapids, MI: Brazos Press.
- Emmons, R. A. (2005). Striving for the sacred: Personal goals, life meaning, and religion. *Journal of Social Issues, 61*, 731-745. doi:10.1111/j.1540-4560.2005.00429.x
- Epstein, M., & Ward, L. M. (2008). "Always use protection:" Communication boys receive about sex from parents, peers, and the media. *Journal of Youth and Adolescence*, *37*, 113-126. doi:10.1007/s10964-007-9187-1
- George, L. K., Ellison, C. G., & Larson, D. B. (2002). Explaining the relationships between religious involvement and health. *Psychological Inquiry*, *13*, 190-200. doi:10.1207/S15327965PLI1303 04
- Green, S. K., & Sollie, D. L. (1989). Effects of a church-based sex education program on adolescent communication. *National Council on Family Relations*, *38*(2), 152-156. Retrieved from http://www.jstor.org/stable/583668
- Gross, J., & John, O. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348-362. doi:10.1037/0022-3514.85.2.348

- Hamilton, B. E., & Ventura, S. J. (2012). Birth rates for U.S. teenagers reach historic lows for all age and ethnic groups. *NCHS Data Brief*, 89. Retrieved from http://www.cdc.gov/nchs/data/databriefs/db89.pdf
- Hardy, S. A., & Rafaelli, M. (2003). Adolescent religiosity and sexuality: An investigation of reciprocal influences. *Journal of Adolescence*, 26, 731-739. doi:10.1016/j.adolescence.2003.09.003
- Hill, P. C., & Butter, E. M. (1995). The role of religion in promoting physical health.

  \*Journal of Psychology and Christianity, 14, 141-155. Retrieved from http://web.ebscohost.com/ehost/detail
- Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist*, 58(1), 64-74. doi:10.1037/003-066X.58.1.64
- Hoge, D. R., Petrillo, G. H., & Smith, E. I. (1982). Transmission of religious and social values from parents to teenage children. *Journal of Marriage and Family, 44*, 569-580. Retrieved from http://www.jstor.org/stable/351580
- Holt, D. B. (1998). Does cultural capital structure American consumption? *Journal of Consumer Research*, 25, 1-25. Retrieved from <a href="http://www.jstor.org/stable/10.1086/209523">http://www.jstor.org/stable/10.1086/209523</a>
- Kirby, D. (2001). Understanding what works and what doesn't in reducing adolescent sexual risk taking. *Family Planning Perspectives*, *33*(6), 276-281. Retrieved from http://www.guttmacher.org/pubs/journals/3327601.html

- Kirby, D. (2002). Effective approaches to reducing adolescent unprotected sex, pregnancy, and childbearing. *The Journal of Sex Research*, *39*(1), 51-57. Retrieved from http://www.sssswr.org/
- Kissel-Ito, C. L. (2007). Five excellent resources on sexuality and religious education. *Religious Education*, 102, 94-98. doi:10.1080/00344080601117721
- Krok, D. (2008). The role of spirituality in coping: Examining the relationships between spiritual dimensions and coping styles. *Mental Health, Religion, & Culture, 11*, 643-653. doi:10.1080/13674670801930429
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *Social organization of sexuality: Sexual practices in the United States*. Chicago, IL: University of Chicago Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer Publishing Company.
- Leach, M. M., Aten, J. D., Wade, N. G., & Hernandez, B. C. (2009). Noting the importance of spirituality during the clinical intake. In J. D. Aten & M. M. Leach (Eds.), *Spirituality and the therapeutic process: A comprehensive resource from intake to termination* (pp. 75-92). Washington, DC: American Psychological Association.
- Lee, B. J. (2007). Moderating effects of religious/spiritual coping in the relation between perceived stress and psychological well-being. *Pastoral Psychology*, *55*, 751-759. doi:10.1007/s11089-007-0080-3

- Lefkowitz, E. S., Boone, T., & Shearer, C. (2004). Communication with best friends about sex-related topics during emerging adulthood. *Journal of Youth Adolescence*, *33*, 339-351. doi:10.1023/B:JOYO.0000032642.27242.c1
- Lefkowitz, E., Gillen, M. M., & Shearer, C. (2004). Religiosity, sexual behaviors, and sexual attitudes during emerging adulthood. *The Journal of Sex Research*, 41(2), 150-159. doi:10.1080/00224490409552223
- Marriner, A. (1971). Sex education for parents. *American Journal of Public Health, 61*, 2031-2037. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Mertler, C. A., & Vannatta, R. A. (2010). *Advanced and multivariate statistical methods* (5th ed.). Los Angeles, CA: Pyrczak Publishing.
- Meschke, L. L., Bartholomae, S., & Zentall, S. R. (2000). Sexuality and parent-adolescent processes: Promoting healthy teen choices. *Family Relations*, 49(2), 143-154. Retrieved from http://www.jstor.org/stable/585810
- Miracle, T., Miracle, A., & Baumeister, R. (2003). *Human sexuality: Meeting your basic needs*. Upper Saddle River, NJ: Prentice Hall.
- Moore, N. B., & Davidson, J. K. (1999). Parents as first information sources: Do they make a difference in daughters' sexual attitudes and behavior? *Journal of Sex Education and Therapy*, *24*(3), 155-163. Retrieved from http://web.ebscohost.com/ehost/detail
- Nunnally, J. C. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.

- O'Donnell, L., Wilson-Simmons, R., Dash, K., Jeanbaptiste, V., Myint-U, A., Moss, J., & Steve, A. (2007). Saving sex for later: Developing a parent-child communication intervention to delay sexual initiation among young adolescents. *Sex Education*, 7(2), 107-125. doi:10.1080/14681810701264441
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, and practice*. New York, NY: Guilford Press.
- Pargament, K. I., Koenig, H. G., & Perez, L. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology*, *56*, 519-543. Retrieved from http://www.jpsych.com/pdfs/Pargament
- Pargament, K. I., & Krumrei, E. J. (2009). Clinical assessment of clients' spirituality. In J. D. Aten & M. M. Leach (Eds.), *Spirituality and the therapeutic process: A comprehensive resource from intake to termination* (pp. 93-120). Washington, DC: American Psychological Association.
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, *37*, 710-724. Retrieved from http://www.jstor.org/discover/
- Park, C. L. (2005). Religion as a meaning-making framework in coping with life stress. *Journal of Social Issues, 61*, 707-729. doi:10.1111/j.1540-4560.2005.00428.x
- Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *General Review of Psychology, 1*, 115-144. doi:1089-2680/97/\$3.00

- Park, C. L., & Slattery, J. M. (2009). Including spirituality in case conceptualizations: A meaning-systems approach. In J. D. Aten & M. M. Leach (Eds.), *Spirituality and the therapeutic process: A comprehensive resource from intake to termination* (pp. 121-142). Washington, DC: American Psychological Association.
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598-609. doi:10.1037/0022-3514.46.3.598
- Pluhar, E., Frongillo, E. A., Stycos, J. M., & Dempster-McClain, D. (1998).

  Understanding the relationship between religion and the sexual attitudes and behaviors of college students. *Journal of Sex Education and Therapy, 23*, 288-296. Retrieved from http://web.ebscohost.com/ehost/detail
- Powell, E. (2008). Young people's use of friends and family for sex and relationships, information and advice. *Sex Education*, 8(3), 289-302. doi:10.1080/14681810802218171
- Powell, L. H., & Jorgensen, S. R. (1985). Evaluation of a church-based sexuality education program for adolescents. *Family Relations*, *34*, 475-482. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Rassin, E. (2005). *Thought suppression*. San Diego, CA: Elsevier Ltd.
- Ream, G. L., & Savin-Williams, R. C. (2005). Reciprocal associations between adolescent sexual activity and quality of youth-parent interactions. *Journal of Family Psychology*, *19*(2), 171-179. doi:10.1037/0893-3200.19.2.171
- Regnerus, M. (2007). Forbidden fruit: Sex and religion in the lives of American teenagers. New York, NY: Oxford University Press.

- Richards, J. M. (2004). The cognitive consequences of concealing feelings. *Current Directions in Psychological Science*, *13*(4), 131-134. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Richards, P. S., & Bergin, A. E. (2005). *A spiritual strategy for counseling and psychotherapy* (2nd ed.). Washington, DC: American Psychological Association.
- Rodgers, J. L., & Rowe, D. C. (1988). Influence of siblings on adolescent sexual behavior. *Developmental Psychology*, *24*, 722-728. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Rogers, R. G. (1996). The effects of family composition, health, and social support linkages on morality. *Journal of Health and Social Behavior*, *37*, 326-338. doi:10.2307/2137260
- Sasaki, J. Y., & Kim, H. S. (2011). At the intersection of culture and religion: A cultural analysis of religion's implications for secondary control and social affiliation.

  \*Journal of Personality and Social Psychology, 101, 401-414.\*

  doi:10.1037/a0021849
- Scales, P., & Kirby, D. (1981). A review of exemplary sex education programs for teenagers offered by nonschool organizations. *Family Relations*, *30*, 238-245. Retrieved from http://www.jstor.org/stable/584136
- Seybold, K. S., & Hill, P. C. (2001). The role of religion and spirituality in mental and physical health. *Current Directions in Psychological Science*, *10*, 21-24. doi:10.1111/1467-8721.00106

- Smith, C. (2003). Theorizing religious effects among American adolescents. *Journal for the Scientific Study of Religion, 42*(1), 17-30. Retrieved from http://csrs.nd.edu/assets/50016/theorizing\_religious\_effects\_among\_american\_ad olescents.pdf
- Sneed, C. D. (2008). Parent-adolescent communication about sex: The impact of content and comfort on adolescent sexual behavior. *Journal of HIV/AIDS in Children and Youth*, *9*(1), 70-85. doi:10.1080/10698370802126477
- Snegroff, S. (2000). No sexuality education is sexuality education. *Family Planning Perspectives*, *32*(6), 257-258. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11030266
- Somers, C. L., & Surmann, A. T. (2005). Sources and timing of sex education: Relations with American adolescent sexual attitudes and behavior. *Educational Review*, 57(1), 37-52. doi:10.1080/0013191042000274178
- Stanton, M. (2009). The systemic epistemology of the specialty of family psychology. In J. H. Bray & M. Stanton (Eds.), *The Wiley-Blackwell handbook of family psychology* (pp. 5-20). Chichester, West Sussex, UK: Blackwell Publishing Ltd.
- Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *Future of Children.org*, *18*(1), 119-146. Retrieved from http://futureofchildren.org/futureofchildren/publications/docs/18\_01\_06.pdf
- Wagner, J., & Rehfuss, M. (2008). Self-injury, sexual self-concept, and a conservative Christian upbringing: An exploratory study of three young women's perspectives. 

  \*Journal of Mental Health Counseling, 30(2), 173-188. Retrieved from 
  http://web.ebscohost.com/ehost/pdfviewer/pdfviewer

- Wegner, D., Schneider, D., Carter, S., III, & White, T. (1987). Paradoxical effects of thought suppression. *Journal of Personality and Social Psychology*, *53*, 5-13. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Wegner, D., Shortt, J., Blake, A., & Page, M. (1990). The suppression of exciting thoughts. *Journal of Personality and Social Psychology*, 58, 409-418. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Worthington, E. L., Riply, J. S., McCullough, M. E., Berry, J. W., Schmitt, M. M., Berry, J. T.,...O'Connor, L. (2003). The religious commitment inventory—10:
  Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology*, 50(1), 84-96. doi:10.1037/0022-0167.50.1.84
- Zinnbauer, B. J., & Barrett, J. J. (2009). Integrating spirituality with clinical practice through treatment planning. In J. D. Aten & M. M. Leach (Eds.), *Spirituality and the therapeutic process: A comprehensive resource from intake to termination* (pp. 143-166). Washington, DC: American Psychological Association.

# APPENDIX A CSHRB MANUSCRIPT PROPOSAL FORM

#### **CSHRB Manuscript Proposal Form**

**Tentative** title: How are differential aspects of sex education (family, peer, religion, and academic) associated with sexual coping in a predominantly Christian undergraduate sample.

Rough Drafts goal: \_\_Spring 2010 Target submission date: Spring 2010

Brief description: I will look at the relationship between different types of sexual education and the need for and different types of coping mechanisms employed by Christian undergraduates in response to sexual thoughts and behaviors.

First author: Kathleen Dena

Second author: Kevin Reimer, PhD Azusa Pacific University

Third author: David C. Atkins, PhD University of Washington

Fourth author: James L. Furrow Fuller Theological Seminary

Fifth author: Mark Regnerus University of Texas, Austin

Sixth author: Donald Baucom University of North Carolina, Chapel Hill

Dissemination target (check all that apply):

☐ Conference presentation (conf. name): <u>APA and AERA</u>

☐ Journal article (name): Journal of Educational Psychology

CSHRB adheres to the American Psychological Association's (2001) publication credit guidelines for authors (p. 350-351; Principle 6.23, a-c).

Authorship order is based on scientific contributions to the research and the manuscript. Proposed authorship order is subject to renegotiation if an author fails to fulfill his/her agreed upon role in a timely manner. If the manuscript has not progressed within 6 months of the date of this agreement, the data return to the authorship pool and another author may be designated to take the lead on the paper.

# APPENDIX B INSTITUTIONAL REVIEW BOARD

### INSTITUTIONAL REVIEW BOARD (IRB) APPLICATION 2010-11 Form B STUDENT RESEARCH PROJECT

(Not for Excluded Classroom Research)

Use this form for: any individual student research project involving human subjects (capstone, thesis, dissertation, etc.) For studies that required full review, please note that the IRB meets once a month and to be considered the project must be submitted ten working days prior to the board meeting.

Student	t: Kathleen Dena		
Phone:	559-905-0749	F	Email: Katdena@gmail.com
Respon	sible Faculty Member: Dr. Kevi	n Reimer, PhD	<b>Department: Graduate Psychology</b>
Phone:		Email: K	Kreimer@apu.edu
AFFEC	Title: HOW DO DIFFERENTIA T SEXUAL COPING COMPAR HOUS UNDERGRADUATES?		
Is this r	research externally funded?	□ Yes	□ No
1. 2. 3. 4.	research is externally funded, list Funding Agency Award Number Amount of Award If there is a contract related to the	his study of whi	ch APU is a party, has the office of
<ul><li>□ Under</li><li>□ Maste</li></ul>	Research (please check) rgraduate er's capstone or thesis oral capstone, thesis, or dissertati	<u>ion</u>	
Expecte	ed Research Start Date: Expecte	d End Date:	
Recom	mendation for IRB Review Categ	gory (see IRB ins	structions)
□ Exp	edited because: Point 8 of Resea	rch Categories	as described on Page 10

# INSTITUTIONAL REVIEW BOARD (IRB) APPLICATION FORM B Student Research Project, cont'd.

Please complete the following sections in enough detail for the IRB to understand the nature, intent and procedure of your project. Enter the following information within this document.

- 1. <u>Title</u>: HOW DO DIFFERENTIAL ASPECTS OF SEXUAL EDUCATION AFFECT SEXUAL COPING COMPARITAVELY IN RELIGIOUS AND NON-RELIGIOUS UNDERGRADUATES?
- **2. Project Summary:** Summarize your project in enough detail to give the IRB an overview of the project

This is a secondary analysis of a preexisting data set obtained by Dr. Kevin Reimer in his grantfunded study on Religiosity and Sexuality in CCCU Undergraduates. The original study was previously approved by Azusa Pacific's IRB (#59-08).

Sexuality in the United States takes many forms. We observe the hyper-sexualized youth and adults in popular television shows, movies, and also pornography. We see people engaging in sexual activity casually, with few consequences. Only three percent of sex scenes portrayed in popular media involve any apparent contraceptive use, and furthermore the lessons that sex can be safe and not have any consequences is overwhelmingly suggested (Regnerus, 2007, p. 137). America is becoming "sexier" while the focus of sex is becoming younger. (Regnerus, 2007 p. 4) Conversely, we also experience sex in our society as being dirty, taboo, and something to be hidden or kept secret. Regnerus argues further: "As a society, we are caught somewhere between understanding sex as sacred and thinking it profane." We struggle to find the middle ground in which most of society feels comfortable.

Somewhere between the over-sexualized media and the ultra conservative anti-sexual attitudes of some religious groups, lies the average ground where many Americans live. The process of learning and understanding one's sexuality involves learning about one's body, while understanding desires that are natural and intrinsic. Furthermore, understanding and engaging with one's sexuality involves developing self-concept, love, and connection, all of which are distinct characteristics of humanity. Like many other subjects and facets of life, the journey to understand one's sexuality begins with education. This topic of sexual education is highly controversial in the United States and contributes to one major part of this study. Developing an understanding of where and from whom adolescents and young adults receive sexual education is of particular interest.

This interplay between coping, education, and religious ideals is one that is convoluted and misunderstood. Although the research is abundant regarding these separate subjects, there is very little literature commenting on the relationship of all three. The current study will address how different aspects of sexual education will affect sexual coping comparatively between religious and non-religious undergraduate samples. By developing and testing hypotheses regarding the relationships between each of the individual methods of sexual education along with the coping strategies, and taking into account the specific necessities of this particular population, I hope to understand how best to address the education and training needs of the population on the topic of sexuality.

3. **Research Question:** State your research questions and hypotheses if applicable

HOW DO DIFFERENTIAL ASPECTS OF SEXUAL EDUCATION AFFECT SEXUAL COPING IN RELIGIOUS AND NON-RELIGIOUS UNDERGRADUATES?

There are 5 hypotheses presented for the outcomes of this study.

H1: The more comprehensive sexual education received in the school system, the lower the need to utilize coping strategies.

H2: The more positive sexual education taught in the home, the lower the need for coping.

H3: The more peer influence and sexual education gained through peers, the greater the need for coping.

H4: The more information that is gained primarily from the media, the greater need for coping.

H5: The more positive sexual education and positive messages learned in the church the less need for coping.

If, however, education is structured around abstinence-only and pledge based programs without any deeper comprehensive explanation, the greater the need for coping. Also to better understand the nature of the coping strategies used, we distinguish between positive and negative coping strategies as well as compare differences in coping need and styles between religious and non-religious undergraduates.

#### 4. Foreseeable Benefits;

The purpose of research is to better serve religious young people on the topic of sexuality. I want to understand what aspects of education, if any, are inducing a need to utilize different coping behaviors, either positive or negative, between religious and non-religious undergraduate students. Even more importantly, are the coping behaviors that are being used having a positive or negative affect on these individuals? If we can know this, we might be able to change the way sexuality is discussed with young people so that it becomes less anxiety provoking, and more holistic in nature.

#### a. How does this research benefit the population of persons similar to participants?

If this research successfully generates insight into a significant deficit in sexual education training, then perhaps it can be utilized in conjunction with the current literature, and in corroboration with school districts and churches to develop education options to address that deficit. This is not just an issue that affects CCCU students, but American young people in general.

#### b. How does this research contribute to closing a gap in the professional literature

The literature has demonstrated the efficacy of comprehensive sexual education. It has offered insight into the deficits of American young people's understanding and education overall in the area of sexuality and sexual issues, and it has also discussed the use of coping mechanisms in situations such as trauma, sexual violence, and LGBTQ issues. The gap lies in addressing the specific form of coping where in individuals experience significant cognitive dissonance where in their religious beliefs inform their moral values, which come in direct conflict with social norms and media influences. This project looks at a particular area of life in society that tends to be under-addressed and over speculated about.

#### 5. <u>Target Sample Demographics</u>:

a. How many subjects in each category

The data set includes approximately 600 participants.

- b. Inclusion and exclusion criteria N/A (secondary analysis of existing, de-identified survey data)
- c. How will participants be assessed for inclusion and exclusion N/A
- d. Who will assess for inclusion and exclusion? N/A

#### 6. Procedures to identify and mitigate risk to human subjects:

a. Recruitment procedures designed to protect privacy. (Privacy is defined as having control over extent, timing and circumstances of sharing oneself with others.)

Sampling was completed in Spring, 2010. Participants ranged in age from 18-23 years. In terms of gender, APU is weighted toward female undergraduates. This disparity was represented in the randomized sample. Based on campus demographics, we the majority of participants were White Non-Hispanic and Asian or Pacific Islanders with a smaller representation of Hispanics, African Americans, and Native Americans. All data were anonymous.

This completed study was reviewed and approved by the Institutional Review Board at Fuller Theological Seminary. The study was additionally approved by Dr. Bill Fiala (Associate Dean of Student Life) and Dr. David Weeks (CLAS Dean). It was also approved by the IRB board at Azusa Pacific University (Appendix II).

# (2) How will you make initial contact with the participants? What is the setting?

Research participants were APU undergraduates. Students were recruited for a randomized sample using a list of emails obtained from the Registrar. Students were randomly selected from the Registrar's list and emailed in blocks of 50. This continued until the APU enrollment goal (approximately 200 students) was met. The letter sent out to students in the first study is presented in Appendix 1.

#### (3) What is the content of your invitation to participate?

As noted above, a random selection of students were emailed the study invitation in Appendix I, which included a URL to the study webpage. The first page of the website was the informed consent (see Appendix XII). If students chose to participate after reading the informed consent, they could click an "I agree" button at the bottom of the informed consent webpage. They were then directed to the IAT/SPF (these measures are detailed below). Once the IAT/SPF tasks were complete, participants continued with the self-report measures. At the completion of the questionnaires, students were thanked and had the opportunity to provide their email address to be included in the lottery.

#### (4) What is your professional relationship with potential participants?

N/A

(5) How will you protect potential participants from perceived coercion in the recruitment process?

N/A (secondary analysis of existing, de-identified data)

#### b. Consenting Process to protect privacy

Privacy is defined as having control over extent, timing and circumstances of sharing oneself with others. Threats to privacy are mitigated by participant's informed consent for participation in the research.

- (1)What are the specific research related issues that the participant needs to understand in order to give informed consent? What would you or your loved ones want to know about procedures and risks? N/A
- (2) The informed consent documents that were provided to students for the initial study are provided in the Appendix XII.
- (3)Who will discuss Informed Consent documents with potential participants or their guardians? Does that person speak the same language as the potential participants? N/A
- (4)What is the procedure for persons who administer Informed Consent to document that that potential participant understands the terms of the consent. See last paragraph of the Informed Consent template. N/A
- (5)Where will the Informed Consent documents be stored and how will you protect the security of the documents? N/A
- c. Steps to protect confidentiality of data
  Confidentiality pertains to treatment of information that an individual discloses in a
  relationship of trust with the expectation that it will not be divulged to others without

permission. Confidentiality is often protected by anonymous responses or by deidentifying data by replacing names with codes. How will you protect confidentiality of participants?

The current data have already been coded and de-identified. The raw data that I am provided will be clean, offering the ability to run statistics and achieve results without identifying information.

d. Data retention and storage
How will you protect stored data and who will have access to the data? Data is
typically stored in a locked cabinet with limited access.

The data is currently being held by Dr. Kevin Reimer, who will maintain control of the data throughout the analysis. Statistical methods will be run on his computer system, thus the data will never be out of his possession. This will help protect the data from tampering or loss.

e. Risks for physical discomfort and emotional distress associated with research procedures

What components of the research procedures might cause physical discomfort or emotional distress for participants? What is anticipated evidence of physical discomfort or emotional distress? N/A

f. How will the research respond to evidence of physical discomfort or emotional distress?

What resources are available to the participant? N/A

#### g. Host for data collection

- (1) If potential participants will be recruited from a school, hospital, religious group, professional association, or any other organization, an official of the host organization for data collection must provide written approval of data collection procedures on their site.
- (2) If potential participants reside outside the US, what is the evidence that research procedures are sensitive to local research context? (Possible sources of evidence are approval from an Institutional Review Board in the host country, or written approval from a governmental health or education agency in the host country)

N/A

#### 7. Research Methods

For *quantitative* studies:

We will utilize students who fall one standard deviation above and below the mean on scales that measure religiosity. The *Religious Commitment Inventory-10* is a measure used to assess positive and negative attitudes towards religion. It consists of 26 items, answered via Likert scale, where participants could choose from five potential answers.

#### a. Randomization procedures

As stated above, Research participants were APU undergraduates recruited for a randomized sample by using a list of emails obtained from the Registrar. Students were randomly selected from the Registrar's list to be emailed in blocks of 50. This continued until the APU enrollment goal (approximately 200 students) was met.

#### b. Data collection instruments

Demographics questionnaire. The first measure was a basic demographic characteristics questionnaire, eliciting information such as gender, ethnicity, and age. We also inquired about relationship status, options including single or married, as a manipulation check to verify that we were recruiting non-married students (Appendix IV).

Religious commitment inventory. (RCI-10, Worthington, Wade, Hight, Ripley, McCullough, Berry, & Schmitt, 2003). The RCI-10 was used to assess positive and negative attitudes towards religion. It consisted of 26 items, answered via Likert scale, where participants could choose from five potential answers. The answers ranged from 1 through 5, where 1 equates to *Not at all true of me*, 3 as *Moderately true of me*, and 5 being *Totally true of me*. Worthington et al. (2003) reported strong internal consistency ( $\alpha$  = .93) for the full scale as well as for the subscales: *Intrapersonal Religious Commitment* (.92) and *Interpersonal Religious Commitment* (.87) Furthermore, there is high correlation between these two subscales, r(154) = .72, p < .001. Worthington et al. (2003) also reported high construct validity. Participants were asked about their attendance at religious services in addition to the RCI-10. This information will be utilized as a baseline to establish religiously oriented students from non-religious students. Having clear and distinguished sample groups will allow for greater clarity in any results particular to religious undergrads (Appendix V).

Sexual education. A sexual education questionnaire was developed for participants to answer questions regarding their exposure to factually based sexual education. They were asked about venues where sexual education had been offered (home, school, church, peers, media). They also answered whether or not they had received helpful sexual education from their faith communities, including how to handle unwanted sexual thoughts or feelings. The questionnaire was made up of three Likert format items with six sub-questions, where the participant could answer each question to six different possible venues. These were answered based on a 1 to 7 scale, where 1 was *Not at all factual*, 4 being *Somewhat factual*, and 7 was *Completely factual*. This questionnaire concluded with an open ended question where participants responded in a short-answer format whether they had received guidance or education from their faith regarding sexuality, as well as how to handle sexual thoughts and images. These answers will be coded and added to their sexual education scores (Appendix VI).

Personal choice/attitudes. The Personal choice/attitudes measure was made up of 25 Likert form items. Here, participants were asked to answer questions about their perception of choice in terms of their sexuality. Questions also addressed their attitudes towards sex and their individual sexuality. Answer choices were ranked on a 1 to 7 scale, where 1 delineates that the participant strongly disagrees, at a score of 4 they neither agree nor disagree, and at a score of 7 they report to strongly agree (Appendix VII).

*Emotional coping*. The measure used to assess coping was *The Brief Cope* (Carver, 1997). For this measure, participants were asked to report on the coping mechanisms used to deal with unwanted sexual thoughts or images. The *Brief Cope* is a 28-item measure that examines 14

different scales of coping strategies with Cronbach's alphas for each individual subscale which are reported as follows: Active coping (.68), Planning (.73), Positive Reframing (.64), Acceptance (.57), Humor (.73), Religion (.82), Using Emotional Support (.71), Using Instrumental Support (.64), Self-Distraction (.71), Denial (.54), Venting (.50), Substance Use (.90), Behavioral Disengagement (.65), and Self-Blame (.69). It should be noted that the scales are only two items each, and despite this, their reliabilities all meet or exceed the value of .50 which is regarded as minimally acceptable (Nunnally, 1978). Factor analysis will take place to determine the relevance of each subscale for this particular study (Appendix VIII).

#### c. Data analysis procedures, including power analysis

First, the process to clearly distinguish our population samples will come from maintaining a mean on the RCI-10, *Religious Commitment Inventory*. To establish a baseline for religiosity, we will use this mean and pick our samples from those individuals who fall one standard deviation above and below the mean score. One standard deviation should offer the level of difference we need to fully compare different belief systems, and thus see clearly how the religious influence may or may not affect an individual's experience of sexual education as it relates to coping. We hope to see clear distinctions in the style and even perceived need to cope in the religious sample more often and with more intensity than we will see in the non-religious sample.

Next, we can begin to clearly distinguish the independent and dependent variables (DV). The independent variables will consist of the different types and venues of sexual education. These will include academic comprehensive sexual education, sexual lessons taught in the home by parents, sexual education obtained within the church context, messages about sex portrayed in the media, and lastly shared sexual information between peers.

The dependent variables (DV) are more difficult to clearly determine at this point. Although we call Coping our dependent variable in the research question, further exploratory analysis must take place to fully understand which coping factors will in fact be addressed. The measure used to assess coping is Carver's Brief Cope which offers 14 different subscales of coping including Active coping, Planning, Positive reframe, Acceptance, Humor, Religion, Using emotional support, Using instrumental support, Self-distraction, Denial, Venting, Substance use, Behavioral disengagement, and Self-blame. Not all of these subscales will be relevant to our given sample. Furthermore, Mertler and Vannatta (2010), suggested that large numbers of dependent variables are not recommended when running multivariate analysis of variance. If there were a large number of DVs, reducing the overall number of variables would allow for more efficient analysis. In exploratory factor analysis, the goal is to describe and summarize data by grouping together variables that are correlated (Mertler & Vannatta, 2010, p. 241). With the grouping of these subscales into more concise dependent variables, we will use multivariate analysis of variance (MANOVA) to analyze the data set. MANOVA is the best statistic to use for this study because it provides the ability to examine more than one DV at a time, or the simultaneous affects of the IV's on multiple DV's. Furthermore, we are able to compare multiple means without increasing the Type 1 error rate. Containing the amount of risk for Type 1 error is the primary reason to use MANOVA rather than run multiple ANOVAs.

#### **Signatures:**

□ Conflict of Interest form completed and attached. (See Form M in the handbook appendices.)

☐ The undersigned have reviewed the IRB and attached the complete pro	e standards for exempt, expedited, and full review by the oject description as required.
If requesting approval as <b>Exempt</b> , plea	ase confirm the following:
	(see Exempt categories 1-6, IRB Handbook, page 12)
Vulnerable population?	$\square$ No
Sensitive topic?	□ No
Exceeds minimal risk?	□ No
If requesting approval as <b>Expedited</b> pl	
	see Expedited categories 1-8, IRB Handbook, page10)
Vulnerable population?	□ No
Sensitive topic?	□ No
Exceeds minimal risk?	□ No
(Definitions of vulnerable populations, 7)	sensitive topics, and minimal risk in IRB handbook page
	sity students, faculty, staff or alumni will be used for this act the Office Institutional Research and Advancement.
Student	
Print Name	Signature
Date	
(If more than one, attach list of names	with email addresses and signatures)
Reviewed and Approved by <b>Faculty A</b> <i>Participants</i> certification	dvisor holding current NIH Protecting Human Research
Print Name	Signature
Date	
Reviewed and Approved by <b>Departme</b> <i>Human Research Participants</i> certification	ent Chair or designee who holds current NIH Protecting ation
Print Name	Signature
Date	- <del>0</del> ·

Submit two complete hard copies and an electronic copy for Exempt or Expedited research, or fourteen complete hard copies and an electronic copy for research requiring Full Board Review to the Office of the Vice Provost for Graduate Programs and Research.

Please note: The Institutional Review Board (IRB) at Azusa Pacific University (APU) is charged with oversight of the protection of human subjects in experimental research. Receiving IRB approval does not constitute institutional approval of the project by APU. If the responsible investigator believes that the project might be inconsistent with the mission and values of APU or potentially not represent the University in a favorable light, it is recommended that the responsible investigator contact the Vice Provost for Graduate Programs and Research.

### For IRB Use Only

□ Approved as <b>Expedited</b> . No further review continues past one year.	needed unless the protocol changes or research
Signature: IRB Chair or Designee	
Date of Approval	Date Approval Expires
□ Approved by Full Board Review	□ Not approved, re-submission required
Signature: IRB Chair or Designee	
Date of Approval	Date Approval Expires

### Appendix I

#### Sexuality, Coping, and Moral Decision-Making in Christian Adolescents

A person's values about sexuality and spirituality are among some of the strongest and most personally meaningful beliefs in young adulthood. There is growing attention to these values and beliefs and their importance to life choices of adults today. We are inviting you to participate in a research project on this topic, conducted by Drs. James L. Furrow and Kevin S. Reimer.

This project will take 15-25 minutes and involves a computer based exercise and a series of questions related to the topics of sexuality and religiousness. Specifically, you will be asked about your involvement in various activities as well as your attitudes and beliefs. The content of this survey is explicit in its reference to sexual practices (e.g. sexual intercourse, oral sex, masturbation) and religious beliefs and behaviors (e.g. prayer, moral beliefs). In light of the sensitive nature of this material, all of your responses will be completely anonymous. We do not have any way to identify who chooses to participate or what information they provide. You will have an opportunity to enter a lottery drawing, where you will have a 20% chance to win \$20 and a 1% chance to win \$100.

Please click the URL below to read more information about this project. You will be asked for a password which is listed below. After you enter the password you will be given additional information about this research study and your rights as a participant. Clicking on this link and password do not require you to become part of the study. After reviewing this information you may click on a box agreeing to participate and you will then begin the survey.

URL:

Password:

Thank you for your time and interest in considering being part of this study.

#### **Appendix II**

#### Fiala Approval

Hi Kevin,

The prior email works fine for me. I hope the project goes well.

Bill

From: Kevin Reimer

Sent: Wednesday, April 23, 2008 9:20 AM

To: Bill Fiala

Subject: FW: Bill Fiala Approval Email

Dear Bill

I hope this finds you well. You may recall the exchange below with Deb Kessel at Fuller Seminary. Deb is a doctoral student and research assistant on my grant to study religion and sexuality funded by the CCCU. I have several collaborators at Fuller.

The core investigator team opted to pull Deb's IRB proposal at APU and resubmit with ourselves listed as principal investigators. She will use our data for her dissertation via secondary analysis.

Before we resubmit the project to APU's IRB, I wanted to confirm the following:

- 1. Would you like to review the survey protocol once more? We have made a few adjustments since Deb approached you in February.
- 2. Would you like to amend your requirements listed below in the email to Deb? The APU IRB requested an approval email from you prior to consideration. I wanted to check with you prior to including the below email response in our IRB application.

Thank you kindly for considering the project.

best wishes

Kevin Reimer, PhD Department of Graduate Psychology

From: Deborah Kessel

**Sent:** Thu 2/28/2008 5:36 PM

**To:** Kevin Reimer

Subject: Bill Fiala Approval Email

Hi, Kevin:

Here is the email I received from Bill Fiala.

#### Deb

----- Forwarded Message

From: Bill Fiala <BFiala@apu.edu> Date: Fri, 18 Jan 2008 14:40:48 -0800 To: Deborah Kessel <dkessel@apu.edu> Cc: Lewis Bonney <LBonney@apu.edu>

Conversation: Institutional Review Board & Your approval Subject: RE: Institutional Review Board & Your approval

Good afternoon, Deborah,

On behalf of the Office of Student Life, I am writing to confirm approval of electronic survey methods for your project. We wish you the best as you proceed with the IRB approval process.

One suggestion as I read your proposal: given our previous research experience with sex related measures, I would guess you will have many non responders on item 13, as there is no item to indicate current abstinence or "I don't," which is how many students will interpret the question.

Sincerely,

Bill

Bill Fiala, Ph.D.
Associate Dean of Students
Director, University Counseling Center
Azusa Pacific University
(626) 815-2109

Note: e-mail is not a confidential form of communication.

----Original Message-----From: Deborah Kessel

Sent: Friday, January 18, 2008 11:54 AM

To: Bill Fiala

Subject: Institutional Review Board & Your approval

Hello, Mr. Fiala:

My name is Deborah Kessel and I am a Ph.D. Student at Fuller Seminary in the

School of Psychology, and I am also an adjunct faculty member at APU in the

undergraduate school of psychology.

I recently submitted my dissertation to the APU IRB for approval and they

requested that I obtain permission from you before they will approve my proposal. I have attached my IRB proposal for your review. I welcome any questions you have and hope that you will approve this research.

Sincerely, Deborah Kessel (626) 487-7089

#### Weeks Approval

----- End of Forwarded Message

Kevin,

If the survey protocol changes are minor, then I don't need to see the IRB proposal again. My approval remains in place.

I am inclined to retain the requirements unless they seriously impede the project in some way. If so, I would consider an amendment.

Cheers,

David

From: Kevin Reimer

Sent: Wednesday, April 23, 2008 9:20 AM

To: David Weeks

**Subject:** FW: David Weeks Approval

Dear David

I hope this finds you well. You may recall the exchange below with Deb Kessel at Fuller Seminary. Deb is a doctoral student and research assistant on my grant to study religion and sexuality funded by the CCCU. I have several collaborators at Fuller.

The core investigator team opted to pull Deb's IRB proposal at APU and resubmit with ourselves listed as principal investigators. She will use our data for her dissertation via secondary analysis.

Before we resubmit the project to APU's IRB, I wanted to confirm the following:

- 1. Would you like to review the survey protocol once more? We have made a few adjustments since Deb approached you in February.
- 2. Would you like to amend your requirements listed below in the email to Deb? The APU IRB requested an approval email from you prior to consideration. I wanted to check with you prior to including the below email response in our IRB application.

Thank you kindly for considering the project.

best wishes

Kevin

From: Deborah Kessel **Sent:** Thu 2/28/2008 5:36 PM

To: Kevin Reimer

Subject: David Weeks Approval

Hi, Kevin:

Here is David Weeks' approval email.

Deb

----- Forwarded Message

From: David Weeks <DWeeks@apu.edu> Date: Fri, 25 Jan 2008 15:06:15 -0800 To: Deborah Kessel <dkessel@apu.edu>

Conversation: Institutional Review Board & CLAS Approval Subject: RE: Institutional Review Board & CLAS Approval

Deborah,

Thanks for your note. I approve your proposal as long as the two following points are agreeable.

- 1. APU will not be identified in any publication or presentation based on this research.
- 2. Gen. Psychology students will have an optional activity for extra credit if they opt not to participate in this research project. I don't want there to be any subtle coercion to participate in a project that might make some students uncomfortable. They need an equally weighted, welcomed, and convenient alternative.

Do I need to forward this note to someone on the IRB?

Have a good weekend,

David

----Original Message-----From: Deborah Kessel

Sent: Thursday, January 17, 2008 5:47 PM

To: David Weeks

Subject: Institutional Review Board & CLAS Approval

Hello, Dean Weeks:

My name is Deborah Kessel and I am a Ph.D. Student at Fuller Seminary in the

School of Psychology, and I am also an adjunct faculty member at APU in the

undergraduate school of psychology.

I recently submitted my dissertation to the APU IRB for approval and they

requested that I obtain permission from you before they will approve my proposal. I have attached my IRB proposal for your review. I welcome any questions you have and hope that you will approve this research.

Sincerely, Deborah Kessel (626) 487-7089

----- End of Forwarded Message

# APPENDIX C DEMOGRAPHICS QUESTIONNAIRE

## Appendix IV Demographics

<u>Introduction:</u> The following questions pertain to general demographic data. This data is helpful for the study, however you don't have to answer any question that makes you feel uncomfortable or makes you feel that your confidentiality may be threatened.

1.	Please	indicate your gender:
		Male
		Female
2.	Please	indicate your age:
3.	Were y	you born in the United States?
		Yes
	a. If y	you were not born in the United States:
	i.	In what country were you born?
	ii.	At what age did you move to the United States?
4.	What i	s your ethnic background?
		White/Caucasian
		Native American/American Indian or Eskimo
		Black/African American
		Chinese or Chinese American
		Japanese or Japanese American
		Korean or Korean American
	Male	
		Mexican, Mexican American or Chicano
		Puerto Rican
		Other Hispanic/Latino
		East Indian
		Middle Eastern/Arab or Arab American
		Other (Please specify: )

5.	W	hat re	eligion has influenced you most:
			Christianity
			Judaism
			Islam
			Hinduism
			Atheism/Agnosticism
			Other (Please specify: )
	a.	If yo	ou are Christian, what is your denominational affiliation
			Baptist
			Presbyterian
			Methodist/Wesleyan
			Pentecostal/Charismatic
			Roman Catholic
		=	Episcopal
			Mennonite/Anabaptist
			Other (Please specify: )
6.	Pl	lease i	ndicate your relationship status:
			Single
		$\overline{\Box}$	Dating casually
			Dating exclusively
			Engaged
			Married
			Living together, not married
			Divorced
			Widowed
			Other (Please specify: )
	ļ		

# APPENDIX D RCI-10

### $\boldsymbol{Appendix}\;\boldsymbol{V}$

### **RCI-10**

<u>Introduction:</u> The following questions pertain to your religious views and religious practices. If you are unsure of exact numbers or frequencies, please provide your best estimate.

**Instructions:** Read each of the following statements. Using the scale provided, CHECK the response that best describes how true each statement is for you.

1	<u>Z</u>	3		4			3		
Not at all true	<b>v</b>		Most	ly tru	e of	<b>Totally</b> True of			
of me	of me of me true of me					me			
								_	
8. I often read b	ooks and magazine	s about my faith.		1 —	$\frac{2}{\Box}$	3	4	$\begin{bmatrix} 5 \\ \Box \end{bmatrix}$	
				<u> </u>					
	cial contributions to	my religious		1	2	3	4	5	
organization.						Ш			
-	trying to grow in ur	nderstanding of my		1	2	3	4	5	
faith.					Ш			Ш	
	specially important			1	2	3	4	5	
	y questions about th				Ш				
	beliefs lie behind n	ny whole approach to	o	1	2	3	4	5	
life.						Ш			
13. I enjoy spend	ling time with other	rs of my spiritual		1	2	3	4	5	
affiliation.									
14 Daligious bal	liefs influence all m	v doolings in life		1	2	3	4	5	
14. Kengious bei	leis influence an in	y dealings in file.							
15. It is important to me to spend periods of time in private				1	2	3	4	5	
religious thou	ught and reflection.								
16. I enjoy worki	ing in the activities	of my religious		1	2	3	4	5	
affiliation.	_	_							
17. I keep well in	nformed about my le	ocal religious group	and	1	2	3	4	5	
have some in	fluence in its decisi	ons.							
10 11 1	1			1	2	3	4	5	
18. I have clear v	alues.								
10. I livra hvy prim	oinles			1	2	3	4	5	
19. I live by prin	cipies.								
20 Lam lavy abi	dina			1	2	3	4	5	
20. I am law-abio	mg.								
21 I have strong	haliafa			1	2	3	4	5	
21. I have strong	ochels.								
22. I am ethical.				1	2	3	4	5	
22. I am cumeat.									

23. I keep high standards.	1	2	3	4	5
24 How often do you often dualicious complete?					

24. How often do you attend religious services?

Never
Less than once a year
About once or twice a year
Several times a year
About once a month
2 – 3 times a month
Nearly every week
Every week
Several times a week.

# APPENDIX E SEXUAL EDUCATION

## **Appendix VI Sexual Education**

<u>Introduction:</u> The following questions pertain to the breadth and depth of any sexual education you have received.

**Instructions:** Read each of the following statements. Using the scales provided, check the response that best describes your experience.

1	2	3	4		3		6		/	′
Not at all			Moderately						Deta	iled/
Extensive			Extensive						Exte	nsive
25. How ex	tensive was the	sexual ed	ducation you	1	2	3	4	5	6	7
receive	d from the follo	wing sour	rces:	1		3	4	3	U	/
a. Pa	arents/family									
b. To	eachers/school									
c. Pe	eers									
d. R	eligious commu	ınity								
	opular culture (		es, music,							
	$\overrightarrow{V}$ )	<i>U</i> ,		_						
f. L	ocal community	groups								
1	2	3	4		5		6		7	'
Completely	y		Neither					(	Comp	letely
Negative			positive nor	-					Posi	tive
_			negative							
			_							
26. How w	ould you charac	terize the	type of							
	education you re			1	2	3	4	5	6	7
followi	ng sources:									
a. Pa	arents/family									
	eachers/school									
c. Pe	eers									
d. R	eligious commu	ınity								
	opular culture (		es, music,							
	V) `	0,	,	_						
f. L	ocal community	groups								
1	2	3	4		5		6		7	'
Not at all			Somewhat					(	Comp	letely
factual			factual						fact	ual
					,	1	1		,	
	ctually based w									
informa	ation you receiv	ed from the	he following	1	2	3	4	5	6	7
sources										
	arents/family									
h To	eachers/school	·								

C.	Peers								
d.	Religious community								
e.	Popular culture (e.g., movies, music,								
	TV)								
f.	Local community groups								
28. What practical guidance have you received from your faith regarding sexuality, including how to handle sexual thoughts and images?									

# APPENDIX F PERSONAL CHOICE/ATTITUDES

# Personal Attitudes/Choice

<u>Introduction:</u> The following questions pertain to your personal attitudes and beliefs regarding sex and sexuality.

**Instructions:** Using the scale below, check the number that best reflects how you feel for each statement:

1	2	3	4		5		6		7
Strongly Disagree			Veither gree nor	• ·					trongly .gree
		d	isagree						
29. I am aware	of my sexua	al motivations.	1	2	3	4	5	6	7
30. If I wanted someone, I	-	safe sex" with on doing so.	1	2	3	4	5	6	7
31. In the mess sexuality, of emphasized	one correct for	heard about orm of sex has beer		2	3	4	5	6	7
32. I have cont	fusing feeling	gs about sex.		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	3	4	5	6	7
	ware of the w sexually aro	vay my mind works used.	s 1	2	3	4	5	6	7
34. Sex is good	d.		1	2	3	4	5	6	7
35. I like feelin	ng sexy.		1	2	3	4	5	6	7
36. I try not to	think about	sex.	1	2	3	4	5	6	7
37. I know imi me sexy.	nediately wh	nen others consider	1	2	3	4	5	6	7
38. I'm not sur	re what to thi	nk about sex.	1	2	3	4	5	6	7
39. Thinking a	bout sex is e	njoyable.	1	2	3	4	5	6	7
40. I don't let of sexual life.		e how to run my	1	2	3	4	5	6	7
41. Sex is conf	fusing to me.		1	2	3	4	5	6	7
42. I usually w sexual imp	orry about n ression on o		1	2	3	4	5	6	7
43. Sex is natu	ral.		1	2	3	4	5	6	7

44. I am assertive about the sexual aspects of my life.	1	2	3	4	5	6	7
45. I feel as though I am free to make my own choice about my sexuality.	1	2	3	4	5	6	7
46. Sex is hurtful.	1	2	3	4	5	6	7
47. In the messages I have received about sexuality, my freedom to choose has been emphasized.	1	2	3	4	5	6	7
48. I hear conflicting messages about sex.	1	2	3	4	5	6	7
49. Sex should only be for procreation.	1	2	3	4	5	6	7
50. Thinking about sex makes me feel dirty.	1	2	3	4	5	6	7
51. Sexual fantasies are fun.	1	2	3	4	5	6	7
52. Sex is boring.	1	2	3	4	5	6	7
53. I am ambivalent about sex.	1	2	3	4	5	6	7
54. Sex is pleasurable.	1	2	3	4	5	6	7

# APPENDIX G COPING

# **Coping**

<u>Introduction:</u> The following questions pertain to sexual thoughts and how you cope with them. Please answer all questions honestly. If you are unsure of a number or frequency, please give your best estimate.

55. In	a giv	en day, how many sexual thoughts would you estimate go through your mind?
		None.
		1 to 3 sexual thoughts.
		4 to 7 sexual thoughts.
		8 to 11 sexual thoughts.
		12 to 15 sexual thoughts.
		16 or more sexual thoughts.
	-	are troubled by sexual thoughts, what is the method(s) you use to expel these ts? (note: you may mark more than one answer):
		I force them out of my head.
		I try to focus on something in the environment.
		I try to think about something else.
		I perform a mental ritual (e.g., pray, count) or a physical ritual (e.g., writing something).
		Other (Please specify: )
		Sexual thoughts do not trouble me.
57. H	ow ar	nxious do sexual thoughts make you?
		Very anxious.
		Somewhat anxious.
		Not very anxious.
		Not very anxious.  Not anxious at all.
		Not anxious at all.  sexual thoughts cause you to feel anxious, what is it about those thoughts that
		Not anxious at all.  sexual thoughts cause you to feel anxious, what is it about those thoughts that nem anxiety-provoking? (note: you may mark more than one answer)
		Not anxious at all.  sexual thoughts cause you to feel anxious, what is it about those thoughts that nem anxiety-provoking? (note: you may mark more than one answer)  They are shameful
		Not anxious at all.  sexual thoughts cause you to feel anxious, what is it about those thoughts that nem anxiety-provoking? (note: you may mark more than one answer)  They are shameful I cannot seem to control them.
		Not anxious at all.  sexual thoughts cause you to feel anxious, what is it about those thoughts that nem anxiety-provoking? (note: you may mark more than one answer)  They are shameful I cannot seem to control them. They tempt me.

59. If you entertain these thoughts, what is your justificati mark more than one answer)	on for doing so? (note: you may								
They are fun and pleasurable.									
They are a normal part of being human.									
They are a lot safer than actually participating in sexual acts.									
Other (Please specify: )									
I don't entertain sexual thoughts.									
Brief COPE (Carver, 1997)  Introduction: Sexual thoughts and images can be stressful and anxiety-provoking for some people. The following items address ways in which some people have chosen to cope with sexual thoughts and images whether or not they are anxiety-provoking. Page The below items ask what you've been doing to cope with your sexual thoughts and images. Clearly many people cope in different ways, we are interested in what you have done. Each item says something about a particular way of coping. When answering each item, consider to what extent you've been doing what the item says and how frequently. Please don't answer on the basis of whether it seems to be									
what the item says and now frequently. Please don't answer on working or not—just whether or not you're doing it.  Instructions: Using the scale below answer the following number that best reflects how you feel for each statement. separately in your mind from the others. Make your answer can.  1 2 3  I haven't been I've been doing I've been do doing this at all. this a little bit. this a media amount	g questions by checking the Try to rate each item ers as true FOR YOU as you  4 sing I've been doing this a								
<ul><li>60. I've been turning to work or other activities to take my mind off things.</li><li>61. I've been concentrating my efforts on doing</li></ul>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
something about the situation I'm in.									
62. I've been saying to myself "this isn't real."									
63. I've been using alcohol or other drugs to make myself feel better.									
64. I've been getting emotional support from others.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
65. I've been giving up trying to deal with it.									
66. I've been taking action to try to make the situation better.									

67. I've been refusing to believe that it has happened.	1	2	3	4
68. I've been saying things to let my unpleasant feelings escape.	1	2	3	4
69. I've been getting help and advice from other people.	1	2	3	4
70. I've been using alcohol or other drugs to help me get through it.	1	2	3	4
71. I've been trying to see it in a different light, to make it seem more positive.	1	2	3	4
72. I've been criticizing myself.	1	2	3	4
73. I've been trying to come up with a strategy about what to do.	1	2	3	4
74. I've been getting comfort and understanding from someone.	1	2	3	4
75. I've been giving up the attempt to cope.	1	2	3	4
76. I've been looking for something good in what is happening.	1	2	3	4
77. I've been making jokes about it.	1	$\begin{bmatrix} 2 \\ \Box \end{bmatrix}$	3	4
78. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	1	2	3	4
79. I've been accepting the reality of the fact that it has happened.	1	2	3	4
80. I've been expressing my negative feelings.	1	2	3	4
81. I've been trying to find comfort in my religion or spiritual beliefs.	1	2	3	4
82. I've been trying to get advice or help from other people about what to do.	1	2	3	4
83. I've been learning to live with it.	1	2	3	4
84. I've been thinking hard about what steps to take.	1	2	3	4
85. I've been blaming myself for things that happened.	1	2	3	4
86. I've been praying or meditating.	1	2	3	4
87. I've been making fun of the situation.	1	2	3	4

# APPENDIX H INFORMED CONSENT FORM

#### INFORMED CONSENT FORM

#### Sexuality, Coping, and Moral Decision-Making in Christian Adolescents

James L. Furrow, Ph.D. Kevin S. Reimer, Ph.D.

You have been asked to take part in a research study. The purpose of this form is to give you the information you will need to help you decide whether to participate in our study. Please read the information carefully. This document discusses important information about the purpose of the research, what we will ask you to do, the possible risks and benefits, and your rights as a volunteer. However, should you have any questions during or after your participation, you should feel free to ask questions of James L. Furrow, Ph.D. or Kevin S. Reimer, Ph.D., the researchers primarily responsible for this study (contact information is below). Once you have read the information below, you may choose to participate in the study or not.

#### **Description of the project:**

You have been asked to volunteer for a research study on sexuality and religion. The Christian church often says little about sexuality whereas American culture frequently presents sexuality (e.g., movies, songs). The purpose of this study is to examine how Christian young adults perceive and experience sexuality, how they cope with sexual feelings/images, and how these are influenced by their religiousness. It is anticipated that the study will involve approximately 200 students at Azusa Pacific University.

#### **Procedures:**

If you agree to participate in this computer based study, here is what will happen. First you will participate in a word-pairing task in which you will be asked to identify and then pair words across the following four categories: sexual words, non-sexual words, positive words, and negative words. The word-pairing task should take approximately 5-10 minutes to complete. Following this you will be asked to complete several questionnaires. You will be asked to describe your background (e.g., age, gender, and ethnicity), sexual behaviors, sexual attitudes, sexual education, and various aspects of your religious life. The questionnaires should take approximately 10-15 minutes to complete. At no time will you be asked to identify yourself as the survey is designed to preserve your anonymity. You have the right to refuse to answer any question or item in any questionnaire. You also have the right to stop taking the survey at any time without any penalty.

Your entire participation will take approximately 15-25 minutes and will be completed online. You will not be contacted again for any further research participation.

#### Risks or discomfort:

This study focuses on sexuality, which is a personal and private matter to most people. Thus, it is possible that you may experience some discomfort at being asked questions about your sexual attitudes and practices. Wherever possible we have tried to avoid topics that would be considered obscene or offensive, though it is always possible that one or

more questions may be perceived that way. If after participating in the study you do experience some discomfort, please contact the APU counseling center, where clinicians will be available to speak with you.

Please remember that you may refuse to answer any question. In addition, all data will be confidential; there will be no way to identify your specific answers to any question (see Confidentiality below).

#### **Benefits of this study:**

Although there is no direct benefit to you for taking part in this study, the research project is designed to explore and inform an understanding of how young Christians experience and perhaps struggle with their sexuality. This information will be helpful in guiding churches and other Christian groups in better ways to discuss sexuality and support young Christians.

### **Compensation:**

By participating in the research study, you may receive monetary compensation. Specifically, at the end of the study, you may provide your email address to be entered in a lottery. If you enter the lottery (i.e., provide your email), you will have a 20% chance of receiving \$20 and a 1% chance of receiving \$100. You will be informed within one week of participation about whether you will receive money and a check will be mailed to you. Finally, you remain eligible for the lottery if you choose not to answer every question, however you are not eligible for the lottery if you do not reach the end of the questionnaires (i.e., you stop participating in the middle of the study) as the prompt for the email address will appear after the last page of the survey.

### **Confidentiality:**

No direct identifying information including names will be collected in this study. In addition, if you provide your email address for the lottery, this will not be linked to any information you provide in the research study. By providing your email, the research coordinator will know that you participated in the study but will have no way to know any of your answers. Thus, the information gathered will be anonymous. Only the investigator and research assistants on this project will have access to this anonymous data. Data will also be kept in a password protected computer and data base.

### Voluntary participation and withdrawal:

Participation in research is voluntary. You have the right to refuse to be in this study. If you decide to be in the study and change your mind, you have the right to withdraw from the study at any time or skip any questions without penalty or loss of benefits to which you are otherwise entitled.

# **Questions, Rights and Complaints:**

If you have any questions about this research project, please call or email either James L. Furrow, Ph.D. (626-584-5563, <u>jfurrow@fuller.edu</u>) or Kevin S. Reimer, Ph.D. (626-815-6000 x5507, kreimer@apu.edu).

If you have any questions or concerns about your rights as a research participant in this study, please direct them to Dr. Rosemary Liegler, Vice Provost for Graduate Programs at Azusa Pacific University at (626) 815-6000 x2036.

#### **Consent statement**

By clicking the "I agree" button below, you consent to participate in *Sexuality and Religiousness in Christian Young Adults* being overseen by Drs. James L. Furrow and Kevin S. Reimer.

This statement certifies the following: that you are 18 years of age or older and you have read the above consent statement and all your questions have been answered. You understand that you may withdraw from the study at any time and that you will not lose any of the benefits that you would otherwise receive by withdrawing early.

All of the answers you provide to James L. Furrow and Kevin S. Reimer will be kept private. You should know that you have the right to see the results prior to their being published.

You may copy and save a copy of this document for your own records, or you may contact James L. Furrow or Kevin S. Reimer for a copy.

# APPENDIX I MANUSCRIPT SUITABLE FOR PUBLICATION

### Running head: SEXUAL EDUCATION, RELIGION, AND COPING

# The Roles of Sexual Education and Religiosity on Sexual Coping in Protestant Young Adults

Kathleen M. Bono, M.A.

Kevin S. Reimer, Ph.D.

Christopher Adams, Ph.D.

Diane Puchbauer, Psy.D.

Azusa Pacific University

#### Abstract

This project addresses what best predicts sexual coping in religious and non-religious undergraduates. Data was obtained from a grant funded study, *Sexuality, Coping, and Moral Decision-Making in Christian Adolescents,* by James Furrow, Ph.D. and Kevin Reimer, Ph.D. Participants included undergraduate, religious, and non-religious students from a number of Christian and public universities across the country. Utilizing all sexual education, religiosity, and coping data obtained through a number of different checklists and instruments, conclusions were identified following application of Factor Analysis and Multiple Regression statistics. Findings indicated positive predictive relationships between *Religious Beliefs and Practices* and two different coping styles, *Thought and Action* and *Relying on Others. Socially Oriented* sexual education was also predictive of *Positive Reframe* coping.

# The Roles of Sexual Education and Religiosity on Sexual Coping in Protestant Young Adults

While discussing sexuality, sexual education, and sexual backgrounds with a group of predominantly Christian undergrads, I could hear the proverbial pin drop. I asked what kinds of sexual education the students had received throughout their lives, what sex-ed meant for them, and what they had learned from it. These questions were met with wide-eyed stares, downcast eyes, and the awkward silence of the group trying ardently to regulate their experience and words.

Hesitantly, those who were either married or engaged raised their hands and shared experiences of pre-marital counseling with their significant others in a church context. These experiences seemed to consist of glowing words regarding what the Lord had in store for them in their upcoming sexual relationships. Rarely were they provided practical knowledge, biological information, or even tips regarding what to expect during a potentially anxiety-provoking wedding night. Soon, others began to timidly raise hands, offering experiences of minimal sexual education in their high school health classes.

Some students, blessed with MDs for parents, shared their experiences of watching videos of live births; being shown pictures of infected genitalia; and being given a cold, dry, physiological overview taught in the same way one might learn the structures of the brain or skeleton.

Finally, a few brave students began to voice their frustrations regarding their experiences of sexual education. They expressed discouragement that in the church they had been taught that "sex is bad." Engaging in sexual activity prior to or outside

marriage, even thinking about it inappropriately, corresponded with self-imposed guilt and repentance. However, they concurrently learned in bible studies focused on the Old Testament book Song of Solomon or in lessons about marital relationships that sex can be a glorious experience. If one could wait until marriage, then he or she would be blessed with an amazing sex life. The discussion highlighted the lack of education for the time inbetween. On the whole, these students had not been instructed on *how* to have a celebrated sex life. How can a couple have these experiences if they do not know where to touch each other to provide pleasure or how to relax and be comfortable with nakedness when they have been constantly reminded to cover up and be chaste?

#### Introduction

Sex in this country is an interesting topic. It permeates so much of society, often without people realizing it. In the media sex is everywhere: Carl's Junior hamburger commercials, family sitcoms, prime-time dramas, and nearly every show with a targeted adolescent audience. Many networks provide programming targeted for teens, particularly young women, that romanticizes a beauty ideal, normalizes casual sex, and demonstrates limited boundaries regarding what is and is not off limits with regard to nudity or sexual content. Sex is also equally available online with a large percent of adolescent boys learning about female anatomy via photo and video pornography (Regnerus, 2007; Subrahmanyam & Greenfield, 2008). Even the simple task of going to a gym to exercise offers a reminder of the presence of sex, with toned bodies in generally revealing attire.

One might gather that the United States is a country of hedonist, sex-crazed, junkies who cannot get enough of such raw and unabashed sexual content, however according to U.S. Census data (Self-Described Religious Identification in the United States), approximately 76% of Americans identify as people of faith, with more than 50% affiliating with a Christian based belief system. The systemic picture becomes more clouded when religious beliefs, conservative morality, and human development are introduced into the picture. While Americans consider themselves to be a tolerant, openminded, and progressive nation, they struggle with societal dissonance, where the importance of family values, moral direction, and religious ideals are complicated by temptation, voyeurism, and scandal. Yet on the whole, they manage to set boundaries, watch television programs, go to work, raise families, and live successfully to some extent. The question then becomes how? To what degree does coping factor into people's lives? How does coping impact how people make sense of such systemic dissonance; to what degree has education impacted the capacity for coping? And lastly, how does religion play into the picture? With such a large percentage of Americans claiming faith, to what extent does religion impact coping specifically, for the positive or the negative?

This interplay between coping, education, and religious ideals is one that is convoluted and misunderstood. Although the research is abundant regarding these separate subjects, there is very little literature commenting on the relationship of all three. The current study addresses how different aspects of sexual education affect sexual coping comparatively between religious and non-religious undergraduate samples. By developing and testing hypotheses regarding the relationships between each of the

individual methods of sexual education along with the coping strategies and considering the specific necessities of this particular population, and understanding of how best to address the education and training needs of the population on the topic of sexuality can be obtained.

#### Methods

The present study is a secondary data analysis of an extramurally-funded research project studying sexual education, religious experience, and coping mechanisms.

Sexuality, Coping, and Moral Decision-Making in Christian Adolescents was established (a) to focus on implicit and explicit sexual attitudes of Christian young adults and (b) to attempt to understand how these attitudes relate to sexual behaviors and decision-making. The researchers also wanted to understand the effects of coping in this process, to further comprehend the underlying experience of Christian young people regarding their sexual experience. The difference between the two studies is the focus on the effects of varying types of sexual education specifically and how these experiences affect or influence coping methods or strategies positively or negatively compared to identified religiosity.

Participants. Participants were college students recruited from schools affiliated with the Council of Christian Colleges & Universities, including Azusa Pacific University, Fuller Theological Seminary, and Point Loma Nazarene University.

Additional samples were obtained from University of Texas at Austin and University of North Carolina, Chapel Hill. Participants were between 18 and 35 years of age. Based on school demographics, the gender of the sample weighted toward women and was composed of mostly Caucasian non-Hispanic individuals, with smaller representations of

Hispanic, African-American, and Asian/Pacific Islanders. Although this sample may not be generalized to the nation as a whole, it was representative of the schools sampled.

Instruments. All measures utilized in the original data collection were self-report and completed online. The entire task took approximately 15 to 25 minutes to complete. The questionnaires to which each participant responded covered religious commitment, religious service attendance, sexual attitudes and personal choice, sexual education, and coping strategies for sexual thoughts and feelings. Participants completed these surveys through Project Implicit via the University of Virginia, which allowed secure access over the web. Participants were provided a generic login and password to access the website (i.e., the login and password were identical for everyone). The login and password also prevented individuals from randomly participating while allowing students to remain anonymous.

As the Sexuality, Coping, and Moral Decision-Making in Christian Adolescents study was ongoing during the production and development of the current analysis, literature review and preliminary hypotheses were developed prior to the completion of the primary project. For the current study, a thorough review of the literature highlighted the extensive attitudes, effects, and employment of sexual education in the school systems, home environment, and church organizations between peers and within the media. Literature was also researched for information regarding common coping mechanisms that may be used in general, as well as particularly with young religious individuals. The role that religion plays in developing a need for coping was also researched.

#### **Data Analysis**

The purpose of the current study was to understand how differential aspects of sexual education affect sexual coping in religious undergraduate students. To initially determine an answer, independent and dependent variables and sample groups were identified.

The independent variables consisted of different types and venues of sexual education, as well as impact of personal religious experience. Education items included academic/comprehensive sexual education, sexual lessons taught by parents, sexual education obtained from church, media sexual messages, and shared sexual information among peers.

The dependent variables (DV) were more difficult to clearly identify initially. Although *Coping* was the basic dependent variable of the research question, further exploratory analysis was required to clarify which coping factors would be specifically addressed. The measure used to assess coping was Carver's *Brief Cope* which offers 14 different subscales of coping including *Active coping, Planning, Positive reframe, Acceptance, Humor, Religion, Using emotional support, Using instrumental support, Self-distraction, Denial, Venting, Substance use, Behavioral disengagement, and Self-blame. Not all these subscales were relevant to the given sample; thus, by applying Factor Analysis and limiting these subscales into more concise dependent variables, later regression analyses were completed.* 

Considering the process of analyses, the following hypotheses were provided. First, using Factor Analysis, what underlying structure exists among the variables of

parental, academic, peer, pop culture, and religious education in addition to numerous coping styles and variables? Secondly, to what extent does sexual education differentially predict sexual coping when compared with religious belief systems and practices? Lastly, it is expected that more factually based sexual education will lend to more positive coping strategies, while more socially informed or informal sexual education will result in poor or negative coping strategies.

#### Results

Exploratory Factor Analysis (EFA) provided an opportunity to address all variables in the particular interest areas (i.e. Religiosity, Sexual Education, and Coping) and which items interacted most significantly with each other. As the protocol in its entirety included 141 individual items, and many of these items addressed a number of different themes, EFA allowed clear and related factors (groups) to be established. By running this statistic, the full protocol was narrowed into a far more manageable data set with groups of items that provided a foundation for each independent and dependent variable.

For the topic of Coping, initial analysis revealed a number of major factors (Table 1). The first, described as *Distraction*, included items such as "Concentrating efforts to do something about them," "Turn to school to take my mind off them," and "Come up with a strategy." The second factor encompassed *Reliance on Others*, including "Get advice from others, "Get emotional support," and "Get comfort from talking to someone." Third, a factor that described choices regarding *Thought and Action* included items like "Taking action to make the regret better," "Pray or meditate," and "Think hard about steps to

take." A fourth factor focused on *Positive Coping* and included items such as "Make jokes" and "Make fun of the situation". A last factor within the data set described *Hopelessness or Resignation* and included two items: "Accept reality of thoughts" and "Learn to live with it."

Following the initial EFA for the Coping variables, reliability analyses were run on all six factors. Cronbach's Alpha, which offers a measure of reliability or internal consistency for the factor and the percentage of excluded variables within the factor, delineated which would be included for further analysis. The percentage excluded indicates the number of respondents who did not answer the question, where the total number of participants was 584.

The *Distraction* factor presented with approximately 51% excluded data as well as a Cronbach's Alpha ( $\alpha$ ) of .73. The *Reliance on Others* factor included 64% excluded with and  $\alpha$  = .81. *Thought and Action* was one of the factors responded to most, with an exclusion rating of only 38% and  $\alpha$  = .65, following the exclusion of one of four initial items. The item removed from the factor was "I blame myself for what happened" and although it was consistent with the factor, its relative strength was quite weak. As a result, it was removed, where following the factor exhibited stronger results. The *Positive Reframe* factor reported an exclusion of 64% with an  $\alpha$  = .65.

Lastly, the *Hopelessness/Resignation* factor revealed exclusion of almost 65% with an  $\alpha$  = .55. As a result of lower reliability compared to the other factors, this particular set was dropped from further analysis. Analysis proceeded with a Coping DV

of four major factors. EFA factor loadings for the Coping construct are presented in Table 1.

Next, all items related to Sexual Education were addressed. Although ideally, the Sex Education items would have undergone EFA too, few items were allotted to obtain strong individual factors. With only 14 available items to utilize from the set, reliability analysis offered the opportunity to determine which items were most closely related to

Table 1

Exploratory Factor Model for Coping Composites

	Factor Loading						
Item	Factor 1	Factor 2	Factor 3	Factor 4			
Distraction							
Concentrate efforts to do something about them	.798						
Turn to school to take mind off.	.739						
Come up with strategy	.708						
Reliance on Others							
Get advice from others		.804					
Getting emotional support		.759					
Get comfort from talking to someone		.737					
Let unpleasant feelings escape		.520					
Thought and Action							
Taking action to make regret better			.686				
Pray or meditate			.645				
Think hard about steps to take			.624				
Positive Reframe							
Make jokes				.789			
Make fun of the situation				.723			
% of variance explained	23.99	9.77	8.72	4.605			

one another and, thus, how best they could be grouped as independent variables. A number of reliability analyses were run using different combinations of items, such that the strongest combination would create the final factors.

Each of the reliability analyses is reported as follows: The three items focused on parental education rendered 4% exclusion rating and  $\alpha$  = .45. The three items focused on religious education rendered 5% exclusion rating with an  $\alpha$  = .25. The three items focused on pop culture education rendered 4.5% exclusion with an  $\alpha$  = .23. The three items focused on Peer based sex education rendered 4.5% exclusion with an  $\alpha$  = .38. Lastly, each of the three school/academic based items rendered 4.5% exclusion with an  $\alpha$  = .42. Because the initial reliability analyses proved so minimal, varying combinations of the different educational types were analyzed based on qualitative hypotheses of relatedness.

Lastly, because there was such variance between the different individual items and the combination of different educational models, some of the different three-item groups were analyzed in a "step-wise" fashion, where one of the items was removed from the item analysis to consider how that particular item affected the overall internal consistency of the other two. The academic/school component was concluded that the item addressed the "extensiveness" of school education played a minimal role in the overall model. When removed from the factor, the internal consistency of the educational component revealed  $\alpha = .52$ . With this information, two final analyses were completed; one focused on *Moral and Factually-Based Education*, including the three items on both the religious and parental components and the two related variables of the

school/academic based education. This analysis rendered minimal exclusion of 5.1% with  $\alpha$  = .58. When completing the Factor Analysis for this *Morally and Factually Based Education*, two items exhibited Eigenvalues lower than the majority of the others: *extent of parental education* and *extent of religious education*. These two items were included in the final factor based on the Cronbach's alpha rendered in reliability analyses. When included in the model, the factor's CA was higher than when the model was tested without. The final analysis included each of the three items of the pop culture and peer-based educational components, which rendered  $\alpha$  = .55, and our second major factor, *Socially Informed* education. A final confirmatory factor analysis was run to establish consistency of the individual items within the two defined factors, yielding consistent results. Analysis results of the confirmatory CFA are presented in Table 2.

For the topic of religiosity, EFA rendered two factors. The first, described as *Religious Beliefs and Practice*, included items such as "My religious beliefs lie behind my whole approach to life," and "I often read about my faith." The second factor, described as *Values*, included value based statements, such as "I am ethical," "I live by clear principles," and "I have strong beliefs." Because the religiosity construct was based on a particular measure, the RCI-10, internal reliability provided a clean and relatively stable list of items. The Cronbach's Alpha for the *Religious Beliefs and Practice* factor was .96, while the *Values* factor was  $\alpha = .86$ . Each of the two factors is presented in Table 3. Findings are consistent with previous research assessing the internal consistency of the RCI-10. Worthington et al. (2003) indicated "two factors with eigenvalues greater than 1.0 were found, which accounted for 72% of total item variance" (p. 87).

Table 2

Confirmatory Factor Analysis for Sexual Education

_	Factor	Loading
Item	Factor 1	Factor 2
Moral and Fact Based Sex Education		
Type of parental sexual education	.615	
Type of academic sexual education	.593	
Factual academic sexual education	.529	
Factual parental sexual education	.526	
Type of religious sexual education	.508	
Factual religious sexual education	.420	
How extensive parental sexual education is	.384	
How extensive religious sexual education is	.326	
Socially Informed Sex Education		
Factual pop culture sex education		.580
How extensive peer sex education is		.555
Type of pop culture sex education		.526
Factual peer sexual education		.505
Type of peer sex education		.482
How extensive pop culture sex education is		.405
% of variance explained	16.41	12.98

Descriptive analyses were run on each of the major themes of the data set including Religiosity, Sexual Education, and Coping behaviors. Each descriptive provided the mean, standard deviation, skewness, and/or kurtosis of each major item group. Furthermore, additional frequencies were run to address the extent of missing data in each of the major factors. Given significant exclusion of certain items or a fair amount of missing data, consultation was sought from Ying Jiang, Ph.D. of Azusa Pacific University. Dr. Jiang adjusted the data set using the List-Wise Deletion Method, where an entire record is excluded from an analysis if a single record is missing.

Table 3

Factor Analysis for Religiosity

		Facto	or Loading
Item		Factor 1	Factor 2
Beliefs	and Practice		
1.	My religious beliefs lie behind my whole approach to life	.878	
2.	I work in activities of religious affiliation	.870	
3.	Religious beliefs influence all dealings in life	.858	
4.	I spend time trying to grow in my faith	.849	
5.	Important to spend time trying to grow in my faith	.845	
6.	I enjoy spending time with my religious community	.838	
7.	Religion answers meaning of life questions	.816	
8.	Frequency of attendance at religious services	.805	
9.	I often read about my faith	.751	
10.	I make financial contributions	.749	
11.	I am informed and have influence	.722	
Values			
1.	I am ethical		.819
2.	I live by principles		.771
3.	I have clear values		.760
4.	I keep high standards		.759
5.	I have strong beliefs		.733
6.	I am law-abiding		.666
% of v	ariance explained	50.534	15.883

The following is a report of the total number of participants within each factor:

Meaning/Beliefs and Practice: 562; Values: 564; Moral and Factually Based Education:

554; Socially Informed Education: 558; Distraction for coping: 283; Reliance on Others

for coping: 431; Thought and Action for coping: 361; and Positive Reframe for coping:

432. A noted change following this application was the deletion of the Distraction coping
factor, due to the limited number of respondents. Furthermore, a qualitative observation

following the final list of factors for the dependent variable of coping suggested a social bias toward the more positive or socially acceptable answer. Each factor within the Coping theme was comprised of significant strength on predominantly positive responses.

**Multiple regression.** Multiple Regression (MR) was run for each of the three coping factors, which served as the dependent variables. Regression analysis procedures offer the purpose of developing an equation that can be used for predicting values on some DV for all members of a particular population. Basically stated, the line of best fit was sought between a number of independent variables and one dependent variable, such that the presence of a significant predictive relationship between them could be ascertained. In this study, each MR analysis was run by including each of the four main independent variables: *Beliefs and Practice, Values, Moral and Factually Based Education*, and *Socially Informed Education*. The outcomes for each are provided.

The first analysis addressed the dependent variable of *Reliance on Others*. This MR was conducted to determine which independent variable (*Beliefs and Practice; Values; Morals and Fact Based; Socially Informed*) was the best predictor of *Reliance on Others* for sexual coping. Regression results indicated one significant linear relationship (*Beliefs and Practice*) that predicted relying on others,  $R^2 = .039$ , adjusted  $R^2 = .030$ , F = 4.285, p < .001. The model accounted for 3.9% of variance for this DV (Table 4).

The second analysis addressed the relationship with each of the same four variables on the dependent variable of *Thought and Action*. Regression results similarly indicated a significant relationship between the variable of *Beliefs and Practice*, with the

Table 4

Multiple Regression Analysis of Religious and Education Factors on Reliance on Others

Variable	В	SE	В	t	p
<b>T7</b> 1	027	0.4.4	022	<i>C</i> 10	527
Values	027	.044	033	618	.537
Beliefs and Practice*	.049	.012	.209	3.971	.000
Socially Informed	.001	.031	.001	.028	.978
Morals and Facts	003	.020	007	139	.889
Model Summary	R	$R^2$	adj R <sup>2</sup>		
-	.197	.039	.030		

*Note.* \*Significant finding p < .01

DV where  $R^2 = .191$ , adjusted  $R^2 = .182$ , F = 20.97, p < .001. The model accounted for 19.1% of variance (Table 5).

A third analysis addressed the relationship one last time with each of the IVs on the dependent variable of *Positive Reframe*. Regression results indicated a single relationship between *Socially Informed* sexual education on the DV of *Positive Reframe* where,  $R^2 = .024$ , adjusted  $R^2 = .015$ , F = 2.63, p < .05. This model accounted for 2.4% of variance in relying on others (Table 6).

Table 5

Multiple Regression Analysis of Religious and Education Factors on Thought and Action

Variable	В	SE	В	t	p
Values	.036	.034	.055	1.038	.300
Beliefs and	.073	.010	.393	7.487	.000
Practice*					
Socially Informed	021	.025	040	837	.403
Morals and Facts	.018	.015	.059	1.187	.236
Model Summary	R	$R^2$	adj R <sup>2</sup>		
	.437	.191	.182		

*Note.* \*Significant finding p < .01

SEXUAL EDUCATION, RELIGION, AND COPING

Table 6

Multiple Regression analysis of Religious and Education factors on Positive Reframe

Variable	В	SE	В	t	p
Values	033	.021	083	-1.548	.122
Beliefs and Practice	005	.006	046	867	.385
Socially Informed*	.033	.015	.109	2.261	.024
Morals and Facts	.022	.009	.012	.241	.810
Model Summary	R	$R^2$	adj R <sup>2</sup>		
•	.155	.024	.015		

*Note.* \*Significant finding p < .05

Lastly, a correlation matrix offered a clearly delineated picture of which variables were correlated either positively or negatively with each other at either the .01 or .05 significance level. *Religious Values* was positively correlated at the p < .01 level with *Beliefs and Practice, Morals and Factually Based Education*, and *Thoughts and Action Coping*. Religious Values was also correlated at the p < .05 level in the negative direction with *Positive Reframes*. *Beliefs and Practice* correlated with *Religious Values, Factually and Morally Based Education*, and *Reliance on Others* all at the p < .01 significance level. *Socially Informed Education* correlated with *Positive Reframe* at the p < .05 level, and *Morally/Factually based education* correlated with *Values* and *Beliefs and Practice* at the p < .01 level, as well as with *Thought and Action* at the p < .05 significance level (Tables 7 and 8).

#### Summary

To address the proposed effects in relation to the preconceived hypotheses, one must revisit the original proposal and adapt the correlation accordingly. The three

Table 7

Descriptive Statistics of All Variables

	M	SD	N
Values	25.44	3.69	567
Beliefs and Practice	34.96	13.04	567
Socially Informed	30.13	4.84	559
Ed.			
Moral and Factual	35.75	7.41	559
Ed.			
Reliance on Others	4.80	2.99	431
Thought and Action	6.56	2.45	361
Positive Reframe	2.37	1.43	432

proposals included: Hypothesis 1: Using Factor Analysis, what underlying structure exists among the variables of parental, academic, peer, pop culture, and religious education in addition to numerous coping styles and variables? Hypothesis 2: To what extent does sexual education differentially predict sexual coping when compared with religious belief systems and practices? Hypothesis 3: More factually based sexual education will lead to more positive coping strategies, while more socially informed or informal sexual education will result in poor or negative coping strategies.

Table 8

Inter-Variable Correlation

	1	2	3	4	5	6	7
1. Values	1						
2. Beliefs and Practice	.396**	1					
3. Socially Informed Ed.	.062	061	1				
4. Morals and Facts	.182**	.162**	.070	1			
5. Reliance on Others	.052	.194**	016	.018	1		
6. Thought and Action	.228**	.428**	065	.132*	.233**	1	
7. Positive Reframe	097*	088	.109*	007	.497**	010	1

*Note.* \*\*Correlation is significant at p < .01. \*Correlation is significant at p < .05.

#### Discussion

This study sought to address the significance of comprehensive sexual education on the sexual coping practices of young Christian adults. Results indicated a significant basal relationship between longstanding religious beliefs and practices and sexual coping. Study outcomes provided insight into the interaction between sexual education, religious beliefs, and values with the utilization of coping strategies.

Hypothesis 1. Using Factor Analysis, what underlying structure exists among the variables of parental, academic, peer, pop culture, and religious education in addition to numerous coping styles and variables? The first hypothesis addressed the key question of internal validity and consistency regarding the grouping of educational milieus. Although it was originally expected that items from the same educational "families" would hold together (academic, parental, religious, pop culture, and peer items would group together), factor analytic results demonstrated stronger relationships when items were grouped based on moral and factual, or social underpinnings. This finding informs a systemic approach to learning, where sexually relevant information is provided across multiple venues throughout an adolescent's life.

Unlike other educational topics, sexual education includes a spectrum of varied issues ranging from biological facts, subjective morals and values, personal beliefs, cultural or social attitudes, and individual experiences. To assume each educational venue offers only a specific type of instruction would be misleading and a misunderstanding of this complex learning system. For example, what is transmitted from parent to child varied based on religious beliefs (Regnerus, 2007), culture/ethnicity (Sneed, 2000), and

perceived need of the adolescent. Parents may provide some anatomical or biological information; but they are more likely to provide relationship advice, moral attitudes regarding sexual behavior, and negative consequences such as STIs or pregnancy (Meschke. Bartholomae, & Zentall, 2000; O'Donnell et al. 2007; Regnerus, 2007; Sneed, 2000). This initial learning is later supplemented in academic or church based venues, where additional biological information, contraceptive options, biblical moral imperatives, relationship advice, and even coping skills are taught. This systemic interaction occurs for socially informed curricula as well, where popular culture and information sharing among peers intersect, resulting in lessons of sexual behavior, relationship advice, socially based sexual attitudes, and experiential anecdotes. The result is a comprehensive educational approach, where multiple venues impart similar yet distinct sexual lessons for which adolescents are tasked to internalize.

Present study findings are consistent with the literature regarding a general grouping process whereby parents, teachers, and church programs offer information that is more moral/factual in nature (Boonstra, 2008; Kissell-Ito, 2007; Powell & Jorgensen 1985; Regnerus, 2007; Sneed, 2000), while the information attained from peers and pop culture is generally more experiential, casual, and less goal oriented—where avoidance of STD or pregnancy and the maintenance of virginity/purity/morality are less important (Brown & Keller, 2000; Coleman, 2007; Kirby, 2001; Regnerus, 2007; Rodgers & Rowe, 1988).

**Hypothesis 2.** The second hypothesis, *Sexual education will play a more* predictive role in sexual coping when compared to religious belief systems and practices

of the participant, demonstrated a reversed finding. Although the importance of sexual education for young people has been established time and again throughout the literature, (Kirby, 2001, 2002; Regnerus, 2007; Somers & Surmann, 2005), the impact of morally/factually-based education on coping was not significant for the population sample. Instead, a significant relationship was identified between the independent variable of religious beliefs/practice with sexual coping – specifically, thought and action as well as reliance on others. To find that deeper religious beliefs carried more statistical weight on coping practices than educational interventions was initially surprising. However, results make clear a fundamental and rather basal argument: core values, religious beliefs, and spiritual practices deeply influence how people cope with life more so than do academics (Ano & Vasconcelles, 2008; Aten & Leach, 2009; Pargament, Koenig, & Perez, 2000; Pargament, Smith, Koenig, & Perez, 1998).

Family Psychology posits that "human behavior occurs within a contextual matrix of individual, interpersonal, and environmental or macrosystemic factors where time, complexity, and reciprocity demonstrate fluidity and perpetual opportunity for growth and adaptation" (Stanton, 2009). People are complex, with multiple factors influencing interpersonal development, moral and values growth, behavior, and belief systems. How people cope with stress is developed through a series of learned responses throughout the lifespan; across systemic factors; and through the incorporation of values, spiritual belief systems, and meaning. Lazarus and Folkman (1984) previously defined coping as a transactional process between an individual and his or her environment, much like the fluid interaction among systemic factors in Family Psychology.

During the process of coping, a person assesses the relationship between his or her situation and the environment, then addresses the relevance of the experience and perceived threats, loss, or benefits of the situation (Lazarus & Folkman, 1984). Religion and faith serve a significantly important function by providing insight and meaning regarding existence (Aten & Leach, 2009) and also skills and resources (Pargament & Krumrei, 2009) during times of struggle. Although education can enhance a knowledge base and provide insight, rarely does it offer the necessary skills to manage sexuality. Thus, the identified relationship between *religious beliefs and practices* with coping reminds one of the foundational lessons, social values, and concrete skills needed in a world that stresses people.

To address the regression findings more specifically, one must acknowledge what kinds of coping practices are informed by religiosity and ask why these particular practices rather than others were influenced. It should be noted that although results indicated consistency with the current literature, namely that religiosity and coping are correlated, the majority of studies addressing this relationship do so in the context of specific "religious coping" practices, where religious practices such as prayer are used as coping strategies to relieve stress (Ano & Vasconcelles, 2008; Bjork & Thurman, 2007; Lee, 2007; Pargament, 1997). As a result, study findings provide insight to a research gap where clarity is warranted in how and why religiosity informs non-religious coping, or what is influential in the place of religion when religiosity is not a factor.

Regression analyses yielded two significant findings related to religiosity. First, religious belief and practice was significantly related to the coping DV thought and

action. Thought and action as a composite variable was comprised of items such as "taking action to make regret better" "pray or meditate" and "think hard about steps to take." Two different coping methods are presented: The first is the use of a religious activity ("pray or meditate"), and the second is a more general approach ("taking action to make regret better" and "think hard about steps to take").

Both the broad relationship between religiosity and *thought and action* and, more specifically, the use of religious methodology as a means of coping, demonstrates consistency with the work of Pargament et al. (1998, 2000) as well as Ano and Vasconcelles (2005) who addressed the significance of religious practices on "psychological adjustment." Across a number of studies and meta-analyses, these authors identified a consistent relationship between positive or negative religious actions as coping strategies and the result of related positive or negative psychological reactions across different stressful situations. Additionally, they established the process where individuals of faith use religious coping mechanisms to serve two simple and consistent purposes: to provide stress relief and to offer meaning and/or support. As indicated, the use of "prayer or meditation" as endorsed by the sample, is well documented across the literature. To what extent are coping practices that encourage relief of stress but not religious in nature impacted by religiosity?

This other component, the use of practices that encourage problem-solving or stress resolution ("taking action to make regret better, thinking hard about steps to take") may be better accounted for as a process of finding meaning, purpose, and hope, which can strengthen individuals during their suffering (Krok, 2008). This indicates an internal

motivation for active or task-oriented coping practices be they religious acts or not. Hill and Pargament (2003) provided three insights into why religiosity or spirituality can act as an internal motivator for people.

Religion as a method of meaning-making. Although the underlying hypotheses for each of this study's findings have been discussed, to truly address the broader relationship between religiosity and coping, there must be discussion regarding the process of meaning-making as a broad motivator for coping. According to Ano and Vasconcelles (2005), a key motivator for religious coping is making meaning and seeking support during a stressful event. Across our findings, the process of coping with the topic theof sexuality has assumed a positive and directional approach as indicated by the coping strategies endorsed and identified. By utilizing *thought and action* and seeking *reliance on others*, young Christian adults are able to pursue meaning and understanding regarding their sexuality and develop a sense of control regarding the role sexuality takes in their lives.

A significant body of literature exists regarding the importance of religion on meaning-making and coping processes. Park and Folkman (1997) developed an integrated meaning-making model of coping with two distinguished levels of meaning. First, they identified *global meaning*, which included the global beliefs and goals of an individual. Global beliefs included the basic internal cognitive structures or ways people experience their reality and how they approach beliefs about their personal world (Park, 2005). In this study, one might think about how the sample population approaches sexuality in relation to their faith system, their biblical knowledge and interpretation, as

well as social ideals and expectations within their faith communities. Described by Regnerus (2007) and Smith (2003), the development of such global beliefs may stem from moral directives, spiritual experiences, and role models, all of which come together to develop a moral order. These global beliefs and goals provide motivation regarding how one should live his or her life and also appraised meaning to the events he or she experiences as stressful or difficult (Emmons, 2005; Park, 2005). Religion offers coping aimed at making meaning of a difficult event through benevolent religious appraisal, religious forgiveness, seeking of religious support, and sometimes spiritual discontent (Pargament, 1997).

Hypothesis 3. The third hypothesis: *More factually based sexual education will lend to more positive coping strategies, while more socially informed or informal sexual education will result in poor or negative coping strategies*, could not be addressed due to insufficient data. As described in the results section, skew in the coping response set did not allow comparison of positive and negative coping processes. This broad response style by the population where primarily positive coping strategies were endorsed could be due to a number of factors.

First is the lack of negative coping skills such as utilization of substances, self-harm behaviors, or risky sexual decision-making. In the initial data set, it was evident that data was missing; and as the data were investigated, it became clear there seemed to be a pattern where the missing data correlated significantly with negative or socially "inappropriate" responses. On the whole, the coping data had a more positive spin, where items such as "I criticize myself", "Use alcohol or drugs to get through," and "Give up

trying to deal" were generally ignored or "passed" during the completion of the measures. Many items such as these were missing responses throughout the data set. It is possible that social desirability bias occurred, where those responding provided information that reflected what would be considered socially acceptable in their communities or among their social norm.

Paulhus (1984) provided insight into two types of social desirability bias, where *self-deception* refers to the tendency to give biased but honestly-held descriptions of oneself, although *other-deception* posits an overly favorable self-description given purposefully to a researcher. Social desirability bias is often referenced in research specifically related to religion and sex, as described by Regnerus; and while behavior cannot be explained by social desirability effects, it can bias estimates of religious influence (Regnerus, 2007, p. 55). The lack of a usable sample of negative coping strategies negated the ability to accurately measure a difference based on education or religious influence.

A second potential explanation for the positive skew in the data could be a lack of specifically negative religious coping items in the study questionnaires. According to Ano and Vasconcelles (2005), there tends to be a relationship between negative religious coping and adjustment to stress. It would be interesting to have access to a specific measure that addresses both positive and negative *religious* coping strategies and compare that to stress-adjustment related to sexuality. The authors' findings demonstrated a positive relationship between negative religious coping and negative psychological adjustment, indicating those who engaged in negative religious coping

strategies experienced more anxiety, distress, and depression. The authors suggested this relationship exists because people who utilize negative religious coping may experience their faith or religion as a burden during stressful times. This relationship was not addressed in the present study and presents potential direction for future research. One might wonder if young Christians experience their faith as burdensome or condemning specifically regarding sexuality and to develop some insight into this stressor might be telling.

A third and final explanation considers a positive reappraisal of stressful stimuli through meaning-making processes. Park (2005) identified two ways in which religion is involved in changing the meaning of stressful situations. First, religion helps the individual see the positive aspects that have come from the stressful situation; second, it provides a means to make more benign reattributions to stressful stimuli. "Positive reinterpretation is a very common, and adaptive, coping response that involves construing the situation in a positive way and identifying the benefits that may follow from a stressful encounter" (Carver, Scheier, & Weintraub, 1989; Park, 2005, p. 712). Park further discussed how many religious traditions emphasize the necessity, and possibly good outcomes, of enduring the difficulties in life. Although it is a very simple concept, there may be parallels for the study population. If there is a more positive spin on stressors and the potential outcomes, then why not posit the same positive approach to the interim of the stressor and the outcome? Positive coping styles and approaches may actually be consistent with the practices of these young adults who have developed, on the whole, a more positive outlook on the frustrations and challenges of life.

### **Clinical Implications**

As Regnerus (2007) found, "The key story of religious influence on adolescent sexual decision making is typically best captured by religiosity" (p. 203), and this study found the same influence of religion on actual coping practices. At this point, the remaining question is what to do with this finding. Since the 1990s, there has been a positive upsurge in mental health professionals' view of religion and spirituality; and the foci on research and clinical training has continued to increase through the present (Aten & Leach, 2009). Clinicians are in an opportune position to incorporate knowledge of human behavior and stress management, in addition to training in religious and spiritual diversity, to offer assistance to academic and church systems as well as the clients (adolescents, couples, families, and individuals) seen in therapy.

Educational interventions. One significant recommendation emerging from the study concerns the implementation of sexual education programs that provide not only factual sexual information, but also values related to positive sexual decision-making, healthy sexuality, and a focus on sexual identity development. Although the findings of this study demonstrated stronger relationships between religiosity and coping directly, the third finding where *socially informed education* predicts *positive reframe coping* must not be disregarded.

Socially informed education, which is typically more experiential, offers an important advantage – affording young adults the freedom to laugh at potentially stressful material. Academic education, if taught in an open-minded and de-stigmatized format, could also offer factual information that lends to safe and healthy sexuality as well as

influence a positive sexual outlook. By imparting a more accepting sexual attitude, dissonance may be avoided in favor of healthy sexual identity within the context of morally accepted Christian ethics.

One way to achieve this goal could include formulating sexual education curricula to be taught within religious houses and or biblical studies programs. Churches are already offering the basics for coping with stress (Ano & Vasconcelles, 2005), such as offering practical skills like seeking community, prayer, and release to God. By adding the necessary discussion about sexuality, both factual and moral, they offer additional insight specifically for sexual identity development and better sexual decision-making. According to Boonstra (2008), this process of incorporating sexual education with the church context has been underway since 2003; however, there continues to be inconsistency and fear regarding how to develop age appropriate curricula that will be accepted by parents and appreciated by students. If trained in religiously oriented programs, then clinicians can learn about the impact and importance of religious beliefs, morals, values, and identity formation within the context of a specific spiritual formation. Equally equipped to work within systems and function as mediators, educators, and program developers, therapists are well suited to aid their local religious houses in developing such a course and facilitating the process of moving it through administration, congregation, parents, and to the ears of students.

Another way to address aiding these young people in the discovery of a healthy sexual identity is to encourage the adults and mentors in their lives to speak up on the topic. Although moral/factual education did not appear to impact coping in the current

study, the literature consistently identified the importance of parents and mentors as preferred and influential sources of sexual discussion and education (Kirby, 2001; Meschke et al., 2000; Powell, 2008; Regnerus, 2007; Somers & Surmann, 2005). Providing family therapy, acting as academic consultants, developing faith oriented sexed programs, and supporting parents and teachers in sexual conversation with teens are ways clinicians, sociologists, and spiritual mentors can be actively involved in the transmission of positive sexual education.

Clinical interventions. Perhaps one of the simplest recommendations following the results of this study is to utilize faith when intervening with emerging adults in clinical settings. As indicated in the results and demonstrated throughout the literature, the use of religion and faith in coping with psychological distress is useful for young adults. Utilizing and building on skills that have been developing since childhood allow deeper growth. To adequately do this, one must be curious about the role of religion and faith in clients' understanding of the world and as it pertains to their core identity.

Familiarizing oneself with the work of religious researchers like Drs. Regnerus and Reimer can provide additional skills and awareness to better understand how young people use religion and the extent to which it permeates their decision-making, coping, and guiding principles for their lives. Clinicians enter the therapeutic relationship with theory and orientation as a guide; but by also utilizing a client's faith and integrating their belief system, they can better conceptualize their needs and the treatment required to help them.

One way to approach the integration of spirituality and religion in therapy is by addressing clients' unique belief systems as aspects of culture and diversity. In their work, A Peaceable Psychology, Dueck and Reimer (2009) addressed the depth and interaction between psychology and cultural diversity, ethnic and spiritual alike. The authors challenged the relatively "apolitical and religiously aloof" aspects of typical "North American Psychology," arguing that "a peaceable psychology privileges the suffering of the poor and the language they use to understand it" (Dueck & Reimer, 2009, p. 18). Although the book is written from the perspective of a Christian psychological approach, the larger theme of cultural competence and curiosity holds across theories and orientations. To work with a religious or spiritual clientele, clinicians are tasked with working collaboratively within their clients' worldview and with a curious and open regard for their culture and upbringing. To fully understand identity, upbringing, resources, coping style, problem-solving, and a basic approach to life, the therapist must be curious regarding what lies beneath the problems presented during intake and open to utilizing the client's background in developing awareness and growth. The particular method for conceptualization or treatment planning stems from a clinician's theoretical orientation; however, the integration of culture and diversity should always be incorporated.

Aten and Leach (2009) addressed the importance and utilization of spirituality at multiple levels of the therapeutic process, from the initial self-awareness of the therapist to clinical intake, case conceptualization, and treatment planning throughout the therapeutic relationship. Much of the work happens with the therapist, where exploration

and development of awareness are crucial to ethical and sound therapeutic work.

Understanding one's own biases, beliefs, and triggers can aid in the developed awareness of countertransference reactions, avoid pathologizing spirituality and religion of the client, and avoid minimizing the significance of religion in a client's life (Aten & Leach, 2009, p. 54). As implied through results, the impact of religious beliefs and values may account for a vast majority of clients' approach to their world, impact how they cope in it, and be relevant to problem-solving and coping. To enter the therapeutic alliance with understanding and openness of oneself as well as eagerness for the client will enhance the client-therapist rapport, and facilitate safety and understanding. Utilizing a spiritual genogram or autobiography are two ways a therapist can begin the process of self-exploration and spiritual awareness.

This study's results are noteworthy in addressing the integration of religion in clinical treatment planning; a relationship has been noted between religious beliefs and practice with coping practices that focus on thought and action as well as relying on others. Although this study did not utilize a clinical sample, much of the stress and psychological discomfort associated with difficulties inherent in developing sexuality may be relevant to an outpatient therapy client. As a result, addressing issues such as social support and problem-solving skills; seeking education or answers to difficult questions; or, more significantly, learning to manage unplanned pregnancy, sexually transmitted infections, or mediating difficult sexual relationships could all be addressed in a therapeutic setting.

Although treatment planning often varies based on theoretical orientation, diagnosis, and the client's personal needs and goals, general foci such as identity, skill development, awareness development, and increasing social support are universal clinical concepts related to treatment goals. Zinnbauer and Barrett (2009) suggested spiritual difficulties and strengths may be relevant to clinical work at several levels including the individual, social, cultural, and global levels. By interacting with the client's spiritual background in addition to the rich multidimensional being (cultural factors, individual factors, interpersonal patterns, environmental factors), developing interventions and utilizing strengths and resources that provide practical benefits can make therapy even more meaningful and comprehensive.

Limitations. One limitation impacting this study included adjustments made to the coping measures prior to sampling. Originally, the coping data was to be collected via Carver's *brief cope* measure. However, to better address the issue of religious coping, this measure was modified with items added and removed to better meet the original examiner's research goals. By not using a completely original coping measure, the breadth of coping factors was limited. Additionally, the coping measure used did not fully address the issues of religious coping as deeply or with as much specificity as possible.

A second limitation was the lack of qualitative data for inclusion. Although qualitative responses were invited in the original protocol, the coding and analysis of that data went beyond the time capability allowed for this project. Youth researchers, including Regnerus, rely significantly on interviews to obtain greater depth, furnishing a

more complete picture of the research question. When addressing significantly personal beliefs, identity development, values, and faith, Likert scales miss some of the deeper meaning affiliated with complex topics such as faith and sexuality.

Future research. One additional matter related to this study and its outcomes that may warrant future investigation is to address the religious coping styles outlined in Pargament's (1997) and Ano and Vasconcelles's (2005) work, where significant relationships were noted between positive and negative religious coping and positive or negative psychological adjustment (psychological outcomes to religiously oriented efforts employed to manage the negative impact of stressful situations; Ano & Vasconcelles, 2005, p. 464). Due to both the positive skew and a lack of pertinent data required to address this question, a new study utilizing additional measures for religiosity, religious coping, and sexual coping could be interesting. Perhaps by addressing the question of negative religious coping practices directly, a clearer picture can be obtained of where young people are struggling to cope, providing better insight in how to help them.

Final thoughts. The goal of this study was to provide evidence demonstrating that increased comprehensive sexual education and open lines of communication in the home and church would positively affect Christian adolescents' capacity for coping. This educational system would decrease stress, increase understanding, and provide skills to manage an ever-increasing sexualized society. Alternatively, the results of the study demonstrated the dominance of values, morals, and skill sets developed through the medium of religious influence and upbringing. The relevance of adolescents' faith and value systems penetrate their psychological stores, offering safety, community, skills, and

characteristics on which they rely during a relatively uncomfortable period of development, as well as while under sexual distress.

In thinking critically about the relationships observed during the current study as well as throughout the literature, one is faced with a number of implications. First, as found in the current project, education does not independently or appreciably impact coping. Furthermore, comprehensive or factually-based education does not influence any particular kind of coping, be it thought, behavior, or distraction. Religion, however, clearly offers direct relationships and skills from which coping is implemented in a generally positive way. *Beliefs and practice* increased the capacity for individuals to rely on others, find solace in their communities, and seek support during times of distress. *Beliefs and practice* also influenced thought and action coping skills, supporting the process of seeking answers and utilizing the practice of prayer or meditation to manage unpleasant feelings or behaviors.

To wonder why education does not affect coping directly is met with three simple answers: (a) Education does not directly necessitate coping (education may not cause distress or make a person engage in a negative behavior, etc); (b) education does not offer specific or concrete coping skills or mechanisms, practically speaking (coping skills training, offer sexual support groups, etc.); and (c) education does not provide *meaning* to the *experience* of sexual development. Although facts, biology, normalization, protection, and de-stigmatization are all offered in a comprehensive classroom, helping a young person understand the deeper, more personal aspects of sex, intimacy, and interpersonal vulnerability may be missing.

Alternatively, religious practice offers both moral imperatives for guiding behavior in addition to concrete actions and skills to utilize during times of struggle or psychological distress. The actions of prayer, seeking advice from a pastor or mentor, obtaining emotional support from peers, and relying on a community for guidance are all practical strategies for managing stress. Additionally, the values and identity focus found in religious and spiritual faith systems offer a platform to address the meanings associated with sexuality. Although there is clearly room for expansion, as identified by the classroom of undergrads referenced in Chapter 2, at least churches are addressing the deeper meanings they place on sexual relationships and marital union.

Finally, to identify the antecedents for coping necessity, one is left with psychological and cognitive dissonance and consequences of behavior. When values and life experiences are incongruent or when negative consequences to a risky behavior are leveled, young people experience distress and require coping to manage. In thinking how to best serve this population, both religion and education might be more successful when utilized in tandem rather than at odds with one another. Educating young people about their bodies, their hormones, and the moral and emotional components of sex can be done even more successfully when their spiritual and religious values/beliefs are also incorporated. Families, churches, and schools ought to work together to offer the most comprehensive education and coping skill sets available; increasing knowledge, building skills, and encouraging sexual development and behavior that is intentional rather than impulsive, safe instead of risky, and imbued with meaning.

What differentiates American young people from those in other nations is the social discontent and taboo laden by society on sexuality overall. By offering education, understanding, and community, as well as assuming the process, acts, and meaning of sex, leaders might be able to decrease sexual "acting out," increase the complexity and depth of intimacy, and ultimately aid in the reclamation of sex in the United States.

### References

- Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology*, *61*, 461-480. doi:10.1002/jclp.20049
- Aten, J. D., & Leach, M. M. (2009). A primer on spirituality and mental health. In J. D. Aten & M. M. Leach (Eds.), *Spirituality and the therapeutic process: A comprehensive resource from intake to termination* (pp. 9-24). Washington, DC: American Psychological Association.
- Bjork, J. P., & Thurman, J. W. (1997). Negative life events, patterns of positive and negative religious coping, and psychological functioning. *Journal for the Scientific Study of Religion*, 46(2), 159-167. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Boonstra, H. D. (2008, Winter). Matter of faith: Support for comprehensive sex education among faith-based organizations. *Guttmacher Policy Review, 1*(1), 17-22.

  Retrieved from http://www.guttmacher.org/sections/index.php?page=policy
- Brown, J. D., & Keller, S. N. (2000). Can the mass media be healthy sex educators?

  Family Planning Perspectives; The Guttmacher Institute, 32(5), 225-226.

  Retrieved from www.guttmacher.org/pubs/journals/3225500.html
- Carver, C., Scheier, M., & Weintraub, J. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267-283. doi:0022-3514/89/0075

- Coleman, L. (2007). Preferences towards sex education and information from a religiously diverse sample of young people. *Health Education*, *108*(1), 72-91. doi:10.1108/09654280810842148
- Dueck, A., & Reimer, K. (2009). *A peaceable psychology: Christian therapy in a world of many cultures*. Grand Rapids, MI: Brazos Press.
- Emmons, R. A. (2005). Striving for the sacred: Personal goals, life meaning, and religion. *Journal of Social Issues*, *61*, 731-745. doi:10.1111/j.1540-4560.2005.00429.x
- Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist*, 58(1), 64-74. doi:10.1037/003-066X.58.1.64
- Kirby, D. (2001). Understanding what works and what doesn't in reducing adolescent sexual risk taking. *Family Planning Perspectives*, *33*(6), 276-281. Retrieved from http://www.guttmacher.org/pubs/journals/3327601.html
- Kirby, D. (2002). Effective approaches to reducing adolescent unprotected sex, pregnancy, and childbearing. *The Journal of Sex Research*, *39*(1), 51-57. Retrieved from http://www.sssswr.org/
- Kissel-Ito, C. L. (2007). Five excellent resources on sexuality and religious education. *Religious Education, 102*, 94-98. doi:10.1080/00344080601117721
- Krok, D. (2008). The role of spirituality in coping: Examining the relationships between spiritual dimensions and coping styles. *Mental Health, Religion, & Culture, 11*, 643-653. doi:10.1080/13674670801930429

- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer Publishing Company.
- Lee, B. J. (2007). Moderating effects of religious/spiritual coping in the relation between perceived stress and psychological well-being. *Pastoral Psychology*, *55*, 751-759. doi:10.1007/s11089-007-0080-3
- Meschke, L. L., Bartholomae, S., & Zentall, S. R. (2000). Sexuality and parent-adolescent processes: Promoting healthy teen choices. *Family Relations*, 49(2), 143-154. Retrieved from http://www.jstor.org/stable/585810
- O'Donnell, L., Wilson-Simmons, R., Dash, K., Jeanbaptiste, V., Myint-U, A., Moss, J., & Steve, A. (2007). Saving sex for later: Developing a parent-child communication intervention to delay sexual initiation among young adolescents. *Sex Education*, 7(2), 107-125. doi:10.1080/14681810701264441
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, and practice*. New York, NY: Guilford Press.
- Pargament, K. I., Koenig, H. G., & Perez, L. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology*, *56*, 519-543. Retrieved from http://www.jpsych.com/pdfs/Pargament
- Pargament, K. I., & Krumrei, E. J. (2009). Clinical assessment of clients' spirituality. In J. D. Aten & M. M. Leach (Eds.), *Spirituality and the therapeutic process: A comprehensive resource from intake to termination* (pp. 93-120). Washington, DC: American Psychological Association.

- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, *37*, 710-724. Retrieved from http://www.jstor.org/discover/
- Park, C. L. (2005). Religion as a meaning-making framework in coping with life stress. *Journal of Social Issues*, 61, 707-729. doi:10.1111/j.1540-4560.2005.00428.x
- Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *General Review of Psychology, 1*, 115-144. doi:1089-2680/97/\$3.00
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598-609. doi:10.1037/0022-3514.46.3.598
- Powell, L. H., & Jorgensen, S. R. (1985). Evaluation of a church-based sexuality education program for adolescents. *Family Relations*, *34*, 475-482. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Regnerus, M. (2007). Forbidden fruit: Sex and religion in the lives of American teenagers. New York, NY: Oxford University Press.
- Rodgers, J. L., & Rowe, D. C. (1988). Influence of siblings on adolescent sexual behavior. *Developmental Psychology*, 24, 722-728. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer
- Smith, C. (2003). Theorizing religious effects among American adolescents. *Journal for* the Scientific Study of Religion, 42(1), 17-30. Retrieved from http://csrs.nd.edu/assets/50016/theorizing\_religious\_effects\_among\_american\_ad olescents.pdf

- Sneed, C. D. (2008). Parent-adolescent communication about sex: The impact of content and comfort on adolescent sexual behavior. *Journal of HIV/AIDS in Children and Youth*, *9*(1), 70-85. doi:10.1080/10698370802126477
- Somers, C. L., & Surmann, A. T. (2005). Sources and timing of sex education: Relations with American adolescent sexual attitudes and behavior. *Educational Review*, 57(1), 37-52. doi:10.1080/0013191042000274178
- Stanton, M. (2009). The systemic epistemology of the specialty of family psychology. In J. H. Bray & M. Stanton (Eds.), *The Wiley-Blackwell handbook of family psychology* (pp. 5-20). Chichester, West Sussex, UK: Blackwell Publishing Ltd.
- Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *Future of Children.org*, *18*(1), 119-146. Retrieved from
- Worthington, E. L., Riply, J. S., McCullough, M. E., Berry, J. W., Schmitt, M. M., Berry, J. T.,...O'Connor, L. (2003). The religious commitment inventory—10:
  Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology*, 50(1), 84-96. doi:10.1037/0022-0167.50.1.84
- Zinnbauer, B. J., & Barrett, J. J. (2009). Integrating spirituality with clinical practice through treatment planning. In J. D. Aten & M. M. Leach (Eds.), *Spirituality and the therapeutic process: A comprehensive resource from intake to termination* (pp. 143-166). Washington, DC: American Psychological Association.

# APPENDIX J CURRICULUM VITAE

## Kathleen M. Bono, Psy.D.

Katdena@gmail.com.

### **EDUCATION**

2008-2014 Doctor of Clinical Psychology, *Emphasis in Family Psychology* 

Specialty Track: Family Forensic Psychology

Azusa Pacific University, Azusa, CA

APA Accredited

Dissertation Title: How Differential Aspects of Sexual Education Affect Sexual Coping in Religious and Non-Religious

Undergraduates.

2008-2010 Master of Arts in Clinical Psychology

Azusa Pacific University, Azusa, CA

2003-2007 Bachelor of Arts in Religious Studies

University of California, Santa Barbara, Santa Barbara, CA

Emphasis in Jewish, Islamic, and Near Eastern Religious

**Traditions** 

### SUPERVISED CLINICAL EXPERIENCE

2013-2014 **Pre-Doctoral Internship** 

Department of Behavioral Health Saint Elizabeths Hospital (SEH)

Washington, DC

Director of Clinical Training: C. Vaile Wright, Ph.D.

- *Setting:* SEH is an urban, publically-funded, 300 bed inpatient psychiatric hospital serving a severely mentally ill adult population that is either civilly or forensically committed in Washington, DC.
- Population: Multi-ethnic urban adults and older adults with chronic and severe mental illnesses; either civilly or forensically committed. Individuals in care (IIC) present with a wide range of severe Psychiatric disorders, Borderline and/or Impaired cognitive functioning, and Personality Disorders.
- Responsibilities: Assisted a multidisciplinary team in the
  psychological treatment and recommendations for 27 male
  individuals on a long-term treatment unit, and 13 individuals on
  an admissions unit for approximately 6 months each. Developed
  Individual Behavior Plans for two IICs by identifying target
  behaviors, and developing individualized interventions.
  Completed 21 psychological assessments, including brief neurocognitive screenings, integrated psychodiagnostic evaluations

for the provision of treatment recommendations, and forensic evaluations to assess malingering, risk, and Competency to Stand Trial. Maintained long-term individual therapy cases with a range of IIC's. Therapeutic orientation was based on the individual needs of the IIC and included Interpersonal, Cognitive-Behavioral, ACT, and Supportive Psychotherapy interventions. Also co-facilitated 4 psychotherapy groups including an ACT/Emotion Regulation group, DBT Skills group, Competency Restoration, and Sex Offender Treatment. Lastly, I worked with the hospital's Forensic Consultation Service completing more than 20 Competency to Stand Trial evaluations, completed with corresponding letters to the court.

Training: Attend weekly didactic seminars in the areas of cultural competency, ethics. individual and group psychotherapy, assessment, forensics, professional and development. Participate in the writing and presentation of an IIC to the SEH Forensic Review Board. Training and shadow experience in the audit of a core service agency. Received upwards of 8 hours of individual and group supervision per week, and present cases for peer consultation.

### **2012-2013 PRACTICUM VI- 442 hours**

County of San Bernardino- Department of Behavioral Health Arrowhead Regional Medical Center (ARMC) Rialto, CA

**Psychiatric Triage Unit** 

Directors: Kipp Thorn, Psy.D.

Primary Supervisor: Jim Bierman, Ph.D.

- Setting: ARMC is a state of the art major medical facility meeting the emergency, psychiatric, and primary care treatment needs of the greater San Bernardino and Los Angeles areas. The Psychiatric Triage Unit is a 50-bed unit accepting individuals under voluntary and involuntary commitment codes, as well as individuals with pending forensic issues.
- Population: Multi-ethnic adults with acute and severe mental illness. Patients with severe Axis I and Axis II diagnoses including but not limited to schizophrenia, schizoaffective disorder, substance abuse/dependence, bipolar disorder, & personality disorders.
- Responsibilities: Conduct structured interviews and intake
  assessment for individuals initially admitted to the Triage Unit.
  Address issues of self/other harm, acute crisis, malingering,
  physical needs, social support, and/or need for substance abuse
  treatment. Provide crisis intervention for select individuals.
  Assess for diversion from the hospital to other community

resources and appropriate programs. Provide case management to individuals and their families.

• *Training:* Attend weekly didactic seminars and trainings on various instruments and interventions. Participate in weekly group and individual supervision meetings, and present cases for peer consultation.

### 2012-2013 PRACTICUM V- 356 Supervised Hours

**Psychological Assistant** 

**Registration Number: PSB-35962** 

Connolly Counseling Group and Associates Claremont, Pasadena, and Santa Monica, CA

Supervisor: Timothy Gunn, Psy.D.

- Setting: A community based private practice serving individuals, children, adults, couples, and families. Provides culturally state-of-the-art appropriate services in the field neuropsychology clinical psychology, offering and psychodiagnostic comprehensive neuropsychological and evaluations, as well as long and short-term therapy.
- *Population:* Multi-cultural children, adults, and older adults. Diverse population of children, adults, couples, and families with all diagnoses.
- Responsibilities: Administer, score, and interpret neuropsychological and psycho-diagnostic test batteries for children and adults. Involvement in interpretation and report writing. Provide long-term, evidence-based treatment to individual adult clients. Conduct research relevant to personal and clinic related interests.
- *Training:* Participate in regular one-on-one supervision sessions as well as receive training in various neurocognitive assessment instruments including WAIS-IV, WISC-IV, DKEFS, NEPSY-II, and Woodcock Johnson.

# 2011-2012 PRACTICUM IV- 802 supervised hours ASSESSMENT CLERK

D ... C. . H

**Patton State Hospital** 

Patton, CA

*Directors*: Annette Ermshar, Ph.D., ABPP and Robert Welsh, Ph.D., ABPP

Primary Supervisor: Robert Koranda, Psy.D.

Secondary Supervisors: Wendy Chan, Psy.D., Kristine Vindua, Psy.D.

• Setting: A major forensic psychiatric hospital run by the California Department of Mental Health to provide psychiatric care and treatment to legally committed and mentally disordered adults in an in-patient setting.

- *Population:* Multi-ethnic adults and older adults with chronic and severe mental illness as well as criminal history. Patients with severe Axis I and Axis II diagnoses including but not limited to schizophrenia, schizoaffective disorder, substance abuse/dependence, bipolar disorder, & personality disorders.
- Responsibilities: Conduct psychological and neuropsychological assessments to clarify diagnoses and inform treatment for a multidisciplinary team. Review charts, administer, score, and interpret test batteries, and compose comprehensive and integrated reports. Provide treatment to patients via group therapy sessions.
- *Training:* Attend weekly didactic seminars and trainings on various assessment instruments. Participate in weekly group and individual supervision meetings, and present cases for peer consultation.

*Tests Administered:* RBANS, WRAT-IV, MMPI-II, PAI, MCMI-III, WAIS-

IV, Rorschach, DKEFS, WMS-IV

### 2011-2012 **PRACTICUM III- 260 hours**

**Psychological Assistant** 

Registration Number: PSB-35962 Persona Neurobehavioral Group

South Pasadena, CA

Supervisor: Timothy Gunn, Psy.D.

- Setting: A multicultural, multilingual private practice clinic adult, and pediatric, geriatric patients neurocognitive deficits. Provides culturally appropriate state-ofthe-art services in the field of neuropsychology, clinical psychology, rehabilitation, and behavioral health. Also provides services forensic psychological in areas of neuropsychological independent medical examinations, personal evaluations, worker's compensation competency and insanity evaluations, and court testimony.
- *Population:* Multi-cultural children, adults, and older adults. Multi-cultural population with diagnoses including ADHD, Autism spectrum disorders, gifted child referrals, traumatic and non-traumatic brain injury, spinal cord injury.
- Responsibilities: Administer, score, and interpret neuropsychological and psycho-diagnostic test batteries for children and adults. Involvement in interpretation and report writing. Review and summarize court depositions and medical charts for litigation reports.
- *Training:* Participate in regular one-on-one supervision sessions as well as receive training in various neurocognitive assessment

instruments including WAIS-IV, WISC-IV, DKEFS, NEPSY-II, and Woodcock Johnson.

### 2010- 2011 PRACTICUM II- 610 supervised hours

# Providence Little Company of Mary Medical Center, San Pedro San Pedro, CA

Supervisors: Daniel Sherman, Ph.D.; Marnie Kagan-Weston, Ph.D.

- Setting: A non-profit private general hospital serving the San Pedro and Long Beach, CA communities. The Rehabilitation Team offers inpatient and outpatient occupational, physical, speech, and psychological therapies to adults and older adults recovering from numerous physical and neurological diagnoses. The Bridges Unit provides acute psychiatric care to an inpatient geriatric population.
- Population: Multi-Ethnic adult and geriatric population. Diverse
  adult and geriatric population with multiple medical comorbidities including stroke, traumatic and non-traumatic brain
  injury, spinal cord injury, neurodegenerative disease and
  orthopedic complexities. Inpatient psychiatric unit offers serves
  to geriatric patients suffering from Axis I and Axis II disorders.
- Responsibilities: Conducted psychodiagnostic and neuropsychological assessments to clarify diagnoses and inform treatment for a multidisciplinary team. Reviewed charts, administered, scored, and interpreted test batteries, and composed comprehensive and integrated written reports. Offered short-term, problem-focused, individual and family therapy with inpatient rehabilitation population. Long-term individual outpatient, rehabilitation-focused therapy directed towards coping, adjustment, ongoing recovery efforts with complex medical complications, integrated family dynamics, and comorbid mood and personality disorders.
- *Training:* Received weekly group and individual supervision. Also, received training on various assessment instruments, including RBANS, COGNISTAT, ReyO, Stroop, Trails A&B, MMPI-II, MCMI-III, and Rorschach.

### 2009- 2010 **PRACTICUM I- 280 hours**

# **Azusa Pacific Community Counseling Center- Azusa High School**

Azusa, CA

Supervisor: Larry Kuhn, Psy.D.

 Setting: Local community mental health center serving the diverse population of Azusa, Ca including children, adolescents, adults, and families. Azusa High School is one of two local high schools. Hours were accrued through the High School Counseling Center.

- *Population:* 9<sup>th</sup> through 12<sup>th</sup> grade ethnically diverse high school population. Adolescent students with emotional, interpersonal, and behavioral problems referred by their teachers and school administration. Presenting problems included peer relational issues, body image, substance abuse, developing sexual and orientation identity, grief, divorce, family conflict, anxiety, depression, and anger management.
- Responsibilities: For a typical caseload of 6-8 students per week, provided talk therapy primarily from a systems perspective, and utilizing CBT interventions. Worked collaboratively with administration and faculty, as well as offered parent/guardian consultation and psychoeducation. In certain cases, collaborated with probation officers and the school police officer regarding appropriate school-based interventions for students in legal or behavioral trouble.
- *Training:* Attended weekly 1.5 hour training seminars. Received weekly individual and group supervision.

### 2009-2010 **PRACTICUM I- 120 hours**

### **Community Counseling Center**

### Azusa, CA

Supervisor: Sheryn T. Scott, Ph.D.; Allison Kazonis, M.A.

- Setting: A community-based counseling center in a low SES community offering individual, couples, and family therapy services.
- *Population:* Ethnically diverse adolescents and college students. Clients presented with issues related to mood disorders, anxiety disorders, and adjustment disorders.
- Responsibilities: Provided individual therapy.
- *Training:* Attended weekly didactic seminars. Participated in weekly individual and group supervision. Conceptualized and presented cases as well as provide recommendations for cases presented by peers.

### ADDITIONAL SUPERVISED HOURS

### 2011 **SUPERVISION- 15 hours**

# Supervision Class with Corresponding Supervision of a 1<sup>st</sup> Year Graduate Student

Supervisor: Sheryn T. Scott, Ph.D.

 Fourth year Supervision course within academic curriculum at Azusa Pacific University. Corresponding individual supervision of a first year Psy.D. student offering individual therapy to a single volunteer undergraduate client seen at a community-based counseling center. 2009

### PRE-PRACTICUM- 28 hours Community Counseling Center

Azusa, CA

Supervisor: Sheryn T. Scott, Ph.D.; Roger Free, M.A.

- Setting: A community-based counseling center in a low SES community offering individual, couples, and family therapy services.
- Population: Volunteer Undergraduate university students
- Clientele Description: Young adults presenting with a variety of issues including stress, relationship problems, social skills problems, communication, identity development and adjustment disorders
- Responsibilities: Provided individual therapy.
- *Training:* Participated in weekly individual supervision.

### RESEARCH TRAINING

2009-2012 **Dissertation in Progress:** 

Proposal Passed: 09/2010 Data Analyzed: 09/2011 Data Colloquium: 09/2012 Final Defense: 06/2013

Advisor: Kevin Reimer, Ph.D. Dean & Professor of Psychology School of Humanities, Religion, & Social Sciences, Fresno Pacific University.

*Title*: How differentiating aspects of sexual education including familial, academic, religious, media, and peer, relate to sexual coping in religious undergraduates.

Committee: Kevin Reimer, Ph.D.; Chair

Diane Puchbauer, Psy.D. Christopher Adams, Ph.D.

2012-Present Research Assistant

California School of Professional Psychology at Alliant University, Gunn Psychological Services

### **PRESENTATIONS**

Bono, K., Bennie, A., Reimer, K., Atkins, D.C., Furrow, J.L., Regnerus, M., Baucom, D., & Wolf, S. (2013, August). *How differential aspects of sexual education affect sexual coping in religious undergraduates*. Poster Presentation at the Annual conference of the American Psychological Association.

### TEACHING EXPERIENCE

### 2011-2012

# Teaching Assistant: Projective Assessment, PPSY 754. Dr. Barbara Janetzke, Ph.D.

### **Azusa Pacific University**

- Supervision of administration, scoring, and interpretation of 2<sup>nd</sup> year Psy.D. students in Rorschach Inkblot Test.
- Taught a weekly lab addressing administration and scoring procedures outlined by Exner Scoring and Interpretation System.
- Assisted students in interpretation and integrated report writing.
- Read and graded assignments and reports of supervised students.

### 2010-2011

# Teaching Assistant: Cognitive Assessment, PPSY 714. Dr. Diane Puchbauer, Psy.D.

### **Azusa Pacific University**

- Trained 1<sup>st</sup> year Psy.D. students in administration of WAIS-IV, WISC-IV, WIAT-III.
- Read and graded assignments and reports.
- Assisted students in interpretation and integrated report writing.

#### 2009-2010

### Teaching Assistant: Cultural Psychology PSYC 400.

Annie Tsai, Ph.D.

### Azusa Pacific University.

- Read and graded assignments and tests.
- Proctored exams.
- Prepared and presented a culturally focused guest lecture.

### ACADEMIC GUEST LECTURES

### March 2010

### Azusa Pacific University Health and Wellness Week Azusa Pacific University

- Coordinated, researched, prepared, and presented information as a part of a panel on healthy female sexuality for Azusa Pacific University female undergraduates.
- Coordinated with the Wellness Week committee, recruited additional speakers for the forum, and provided program development.
- Presented specifically on the importance and relevance of sexual education as relates to coping processes, healthy selfimage, and well-being.

# 2009 Psychology 401: Cultural Psychology Azusa Pacific University

How differential aspects of sexual education affect coping strategies in Christian undergraduates.

- Researched, prepared, and presented on the basis of ongoing research.
- Power point slides dedicated to practical uses of research, background of the population, and the available research in print.
- Presentation was created for the target research population.

### **ACADEMIC MEMBERSHIPS**

2009-Present	APA Division 53: Clinical Child and Adolescent Psychology, Student
Affiliate	
2009-Present	APA Division 43: Family Psychology, Student Affiliate
2008-Present	American Psychological Association, Student Affiliate
2008-Present	American Psychological Association of Graduate Students