

THE RELATIONSHIP BETWEEN ADOLESCENT RELIGIOSITY AND DELINQUENT
BEHAVIOR: EXPLAINED BY FUZZY-TRACE THEORY

A Thesis

Presented to the Faculty of the Graduate School

of Cornell University

in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

By

Andrew Noel Hsia

August 2012

© 2012 Andrew Noel Hsia

ABSTRACT

Previous studies have found a significant but moderate relationship between religiosity and decreased delinquent behavior. A significant negative relationship between religious commitment and delinquent behavior was replicated in this study. Investigation into potential theoretical mechanisms, such as fuzzy-trace theory, behind the relationship between delinquent behavior in adolescents (N=807) was pursued. According to fuzzy-trace theory, which is a dual-process model, endorsement of the categorical (absolute) principle, “no risk is better than some risk,” is associated with less risk taking and therefore less delinquent behavior. On the other hand, endorsement of the ordinal (relative) principle, “less risk is better than more risk,” is associated with greater risk taking which is likely to lead to more delinquent behavior. It was hypothesized that increased use of gist-based processing would explain unique variance in the protective effect of increased religious commitment on delinquent activity (i.e., use of gist-based processing mediates or moderates the effect of religious commitment on delinquency). As predicted, religious commitment was significantly related to gist-based understanding and practices – a positive relationship between religious commitment and endorsement of the absolute statement was found. When participants endorsed the absolute principle, they were more likely to have higher religious commitment/religious importance while also participating in less overall delinquency. There was also a mediating effect of endorsement of the absolute statement on the occurrence of aggregate delinquent activity, frequency of skipping school, and riskiness of sexual behavior. However, when adolescents who were over the legal age of consent in their state were excluded, the mediation by the absolute statement on the relationship between religious commitment and risky sexual behavior missed significance. There was also a moderating effect of the absolute statement endorsement by aggregate religious commitment on

the frequency of illegal drug use. When other factors such as age, gender, time without adult supervision, and ethnicity were controlled for, the significant effects of endorsing the absolute and relative risk statements as well as the positive relationship with religious commitment continued to significantly explain unique variance in delinquent behavior for adolescents. Even when the risky sexual behavior item was removed from the aggregate delinquency scale, the endorsement of the absolute statement as well as religious commitment continued to significantly explain unique variance in the frequency of adolescent delinquent behavior. The relationship between aggregate delinquency and age reflects that as adolescents grow older they are more likely to participate in more frequent delinquent behavior; especially risky sexual behavior. The significance of time without adult supervision and aggregate delinquency suggests that there may be a difference between the opportunity to commit delinquent behavior and the desire to actually commit antisocial behavior. Categorical and ordinal statement endorsement did provide one explanation for the relationship between religious commitment and delinquency, but it also explained unique variance in delinquency, as predicted.

BIOGRAPHICAL SKETCH

Andrew Noel Hsia received his Bachelor of Science degree from the Department of Human Development in the College of Human Ecology at Cornell University in 2011. After graduation he continued his work with Dr. Valerie Reyna's Laboratory for Rational Decision Making to pursue a Master of Arts degree in Developmental Psychology with a concentration in Law, Psychology, and Human Development at Cornell University.

獻給上帝和我的家人

ACKNOWLEDGMENTS

I would like to thank Dr. Valerie Reyna for supporting and encouraging the pursuit of my aspirations. I also would like to thank Dr. Charles Brainerd for sharing his knowledge and experience about research and the law with me. Much appreciation also goes out to Evan Wilhelms, Jonathan Corbin, Priscila Brust-Renck, Chrissie Chick, Andrew Lazar, and the other members of the Laboratory for Rational Decision Making, especially the fMRI team, for their support, advice, and invaluable help. Finally, I thank my family and Squirt for always loving and caring during the difficult times.

TABLE OF CONTENTS

Biographical Sketch	iii
Dedication	iv
Acknowledgements	v
List of Figures	viii
List of Tables	ix
Chapter 1 – Introduction	1
Context of Religion.....	1
Context of Delinquency.....	5
Relationship between Religion and Delinquency.....	7
Theoretical Background	11
Study Purpose	19
Chapter 2 – Methods.....	20
Participants.....	20
Research Design.....	21
Measures.....	21
Statistical Analysis.....	24
Chapter 3 – Results.....	26
Religious Commitment and Delinquency.....	26
Religious Denominations.....	28
After School Activity and Other Factors.....	32
Categorical/Ordinal Risk.....	49
Categorical/Ordinal Endorsement on Fundamentalism.....	52
Categorical/Ordinal Endorsement on Religious Commitment and Delinquency.....	53
Social Desirability and Index of Peer Relations.....	67
Chapter 4 – Discussion.....	68
Religious Commitment	68
Delinquency	70
Religion, Categorical/Ordinal Endorsement, and Delinquency.....	70
Limitations.....	74

Future Directions.....	76
References.....	78
Appendices.....	89
Appendix A – Original Survey.....	89
Appendix B – Descriptive Statistics.....	126
Appendix C – Scale Item Analysis.....	148
Appendix D – Correlations.....	160
Appendix E – Chi-Squared Tests.....	180
Appendix F – Analysis of Variance (ANOVA) Results.....	200
Appendix G – Factor Analysis.....	292
Appendix H – Regression Results.....	295
Appendix I – Mediation Figures.....	302
Appendix J – Moderation Figures.....	344

LIST OF FIGURES

Figure 3.1 – Frequency of Aggregate Delinquency and Age.....	36
Figure 3.2 – Frequency of Aggregate Delinquency and Time without Adult Supervision....	42
Figure 3.3 – Aggregate Religious Commitment and Average Parental Education	43
Figure 3.4 – Frequency of Aggregate Delinquency and Average Parental Education	44
Figure 3.5 – Absolute Statement Endorsement and Usual Grades in School.....	45
Figure 3.6 – Relative Statement Endorsement and Usual Grades in School	46
Figure 3.7 – Frequency of Aggregate Delinquency and Usual Grades in School.....	47
Figure 3.8 – Aggregate Religious Commitment and Usual Grades in School	48
Figure 3.9 – Moderation by the Endorsement of the Absolute Statement on the Relationship between Aggregate Religious Commitment and Frequency of Illegal Drug Use.....	57

LIST OF TABLES

Table 3.1 – Regression: Measures to Predict Delinquency (with Sexual Behavior).....	65
Table 3.2 – Regression: Measures to Predict Delinquency (without Sexual Behavior).....	66

CHAPTER 1

Introduction

No matter where a person looks today, there are religious influences that affect cultures, politics, and even highly charged world events. Worldwide estimates of faith and belief systems indicate that approximately 88-93% of the population believes in a God or gods (Zuckerman, 2007). With the world population having just surpassing 7 billion people, the number of faith believers around the world is quite significant (United States Census Bureau, 2011). It is important to note that while a large majority of people may have a certain faith or belief system, their confidence in and devoutness to that belief system varies and may have a lasting impact on their decisions and judgments of risk. This potential variation in judgment and decisions making by religious groups is especially prominent during adolescence when human development is in its prime. The impact of religion on adolescents' judgment has the potential to seriously influence antisocial or delinquent behavior. In order to understand this relationship, the context of religion and decision making must be investigated.

Context of Religion

What is religion and why might it influence delinquency? Exploring answers to this question will provide a framework with which to base the current study on. Defining the nature of religion is essential to understanding the various spectrums of commitment and fundamentalism that exist within diverse religious domains.

Defining religion and religiosity. Religion has been defined one way as the cognition, affect, and behavior that rise from the awareness of, or perceived interaction with, supernatural entities that are presumed to play an important role in human affairs (James, 1958; Pratt, 1934).

A more common definition today revolves around the institutionalized system of religious attitudes, beliefs and practices (Religion, n.d.). Among all adults in the United States, 51.3% identify with some form of Protestant denomination while 23.9% identify as Catholic, totaling to just over three-quarters of the country's population (Pew Research Center, 2008). A large majority of Americans associate themselves with a particular religion.

The term religiosity has been loosely exercised in modern culture and has only recently become more commonly accepted as the degree of piety or religious importance and involvement in a community (Vaughan, de Dios, Steinfeldt, & Kratz, 2001). Religiosity is distinct from religious affiliation in that it is a multidimensional phenomenon (Cohen et al., 2009; Cohen, Hall Koenig, & Meador, 2005; Cohen & Hill, 2007). However, the use of the term religiosity could refer to either ideological commitment or spirituality; spirituality is increasingly used to refer to the personal, subjective side of the religious experience (Hill & Pargament, 2003; The Barna Group, 2005). Since religiosity has subtle distinctions, it may be useful to explore some of the components of being religious.

Religious fundamentalism and religious commitment. Categorizing different religions and denominations is difficult because each group possesses unique qualities that vary by personal perspective. One way of categorizing religion is to place groups along a continuum from most fundamental to most liberal (Smith, 1990). When analyzing the various Christian groups, for example, fundamental could also be called orthodox, conservative, or evangelical, while liberal could also be called secular, modern, or humanistic (Smith, 1990). While many researchers and scholars use these terms interchangeably, there are again subtle differences between terms such as evangelical and fundamental that are often overlooked. To a religious fundamentalist moral decisions are only seen to be black-and-white, while a religious liberal may

only see decisions as gray; to an evangelical, moral decisions are black, white, and gray (Patton, May 17, 2011). But being religiously fundamental is more than just seeing decisions as black and white, it is potentially about observing nonnegotiable aspects of the Christian faith and attempting to live their life by those principles.

Christian fundamentalists exist on one side of a hypothetical spectrum and believe in five key points: (a) the inerrancy of the Bible and its divine inspiration, (b) personal salvation by accepting Christ as their Savior, which is often referred to as a born-again experience, (c) the imminent return of Christ, (d) the desire to share their faith with others, and (e) acceptance of most traditional beliefs such as the Trinity, the Virgin birth of Jesus Christ, and the existence of angels and the Devil (The Barna Group, 2001, 2004, 2005; Smith, 1990). Fundamentalists want to maintain and espouse the religious traditions as they have received them.

Classifying a group as religiously liberal, on the opposite side of the spectrum, varies more widely in terms of beliefs. Some commonalities are as follows: (a) emphasis on concerns about the nature and operation of this world more than salvation in the next which sometimes lends support for social action and progressive reform, (b) recognition of secular change and science as probable rather than anti-religious, (c) faith in the literal message of the Bible and particularly in Biblical miracles which may be seen as either questionable as historical facts or metaphorical in nature, and (d) less acceptance of the Trinity, the Virgin birth of Jesus Christ, and the existence of angels and the Devil (Smith, 1990). Liberals are more willing to push the envelope either in areas of doctrine or practice to adjust for modern ways of thinking.

Fundamentalism could be used to describe a group that views religion as the foremost guidance in their lives and engages in action based on religious conviction (Emerson & Hartman, 2006). Alternative definitions (as characterized by Emerson & Hartman, 2006) seek to explain

the behavior of the group in society. Almond, Appleby, and Sivan write that fundamentalism is “a discernible pattern of religious militance by which self-styled ‘true believers’ attempt to arrest the erosion of religious identity, fortify the borders of the religious community, and create viable alternatives to secular institutions and behaviors” (2003, p. 17). Another view suggests that fundamentalism is a cognitive and affective orientation to the world that is characterized by protest against change and the ideological orientation of modernism (Antoun, 2001, p. 3). Together, fundamentalists are strong traditionalists who see deviation from their beliefs as unacceptable (Emerson & Hartman, 2006).

There are multiple ways of measuring fundamentalism, which is a distinct concept from religious affiliation (Cohen et al., 2009; Hill & Pargament, 2003). This is beneficial in that multiple measures allow researchers to assess different angles of fundamentalism. Some strategies utilize prior classification schemes, membership in theologically oriented ecumenical associations, surveys of denomination members or clergy, analysis of the denomination’s theology, and self-identification (Smith, 1990; Emerson & Hartman, 2006). Other approaches measure religious behavior, such as frequency of religious services attended, as well as psychological experience and motivation for their religious beliefs (Cohen et al., 2009; Allport & Ross, 1967). However, results from different studies are difficult to compare when there are many interpretations of measurement strategies.

While religious fundamentalism and religious liberalism are often described as a single dimension, introducing a religious commitment spectrum provides another angle by which to classify religious groups. Religious commitment incorporates elements about religious importance, frequency of religious services, and engagement in religious activities (The Barna Group, 2005; McCullough & Willoughby, 2009). Hirschi & Stark (1969) originally measured

“religiosity” simply by participation in religious activities. However, measuring “religiosity” by only one measure takes for granted the fact that religion takes into account many different aspects of life (Higgins & Albrecht, 1977). People could potentially hold beliefs that would place them in between pure fundamentalism and pure liberalism. In order to differentiate between people who hold the same set of beliefs, differing degrees of commitment could be measured which may vary depending on the person.

A religious commitment spectrum could then be used to compare across religious denominations. In the present study we create a religious commitment scale by combining questions on religious importance, frequency of attendance at religious services, and frequency of attendance at religious activities. These items allow for the incorporation of the original line of questioning that Hirschi and Stark (1969) began while still allowing for the analysis of mechanisms potentially driving the relationship between religiosity and delinquency.

Context of Delinquency

Adolescence is a time of increasing independence and searching for autonomy (Moffitt, 1993). However as the gateway to adulthood, adolescence represents a time where accessibility to risk-taking opportunities (e.g., driving a vehicle without supervision) merges with immature risk attitudes, understanding, and self-regulation that can be cause for concern (Byrnes, 1998; Gottfredson & Hirschi, 1990; Reyna, 1996).

The tremendous public health and safety concerns of additional risky behavior during adolescence are cause for alarm (Reyna & Farley, 2006). The prevalence of adolescent use of alcohol, tobacco, and marijuana have been associated with concurrent and future harms both to the adolescent making the choice and the public at large (Baumeister & Tossman, 2005; Centers for Disease Control and Prevention, 2006; Ellickson, Tucker, Klein, & Saner, 2004;

Hingston, Heeren, Jamanka, & Howland, 2000; Reyna & Rivers, 2008). Longitudinal research probes deeper into the issue to reveal that drug use can cause more problems for an adolescent which often precedes anxiety disorders, depression, and conflict with adults (Chassin et al., 2004). Creating policies or measures to help curb less desirable activity during adolescence could potentially buy time or nudge adolescents onto a pro-social track that promotes positive physical and mental health outcomes (Reyna & Farley, 2006). But nudging adolescents toward making more pro-social choices is no easy task as adolescents face many novel opportunities to explore the environment that is only beginning to open up for them.

Adolescents participate in a substantial amount of delinquent activity. In 2004, Monitoring the Future reported that 30 percent of high school seniors reported binge drinking (classified as having had five or more alcoholic drinks in a row during the past five weeks), while 16 percent were daily cigarette smokers, and 6 percent were daily marijuana users (Johnston et al., 2005). Cigarettes, which are a highly addictive drug, have been found to provide more satisfaction and cause less pain upon withdrawal during adolescence than later in life (O'Dell et al., 2004). This is problematic because continuation of smoking into adulthood makes quitting more difficult than if they had stopped when they were young, in addition to the potential physiological damage that might occur. When adolescents participate in steady drinking they are potentially damaging the hippocampus and the prefrontal cortex which impairs memory and self-control (De Bellis et al., 2000; White & Swartzwelder, 2004). But stopping this routine may not be simple because the neurological drive for intense sensations makes adolescents seek the quick but intense rush that drugs can provide (Berger, 2006). Adolescents benefit from protective and preventative factors that will help to curb and decrease behavior that is detrimental to the ongoing development of their mind and their body.

Relationship between Religion and Delinquency

Previous research has found a relationship between religion and delinquency that may account for decreases in delinquent behavior which will be explored in the proceeding section.

Historical roots. The conventional attitude has been that religious individuals will be less likely than those who are not religious to commit delinquent acts (Stark, 1996). The notion that greater religiosity in adolescence is linked to lower levels of involvement in a wide range of undesirable behaviors from alcohol, tobacco, and drug use, to other forms of delinquency and risky sexual behavior has been consistently supported with empirical studies (Laird, Marks, & Marrero, 2011). The support from the experimental literature has not always been the norm, nor has it been entirely conclusive.

One controversy has centered on the article published by Hirschi and Stark (1969). The authors claimed that they had evidence of no significant difference between students who attended church every week and those that didn't on self-reported delinquent activities. The authors also found that students who believed in the Devil and in a life after death were just as likely to report delinquent activities compared to students who did not believe in a supernatural world (Hirschi & Stark, 1969). While it may have been difficult to contest the findings reported by Hirschi and Stark, their interpretation of the results was "very much open to question" (Burkett & White, 1974, p. 455). Numerous articles were published in the following decades in response to Hirschi and Stark's conclusions that the church was essentially "irrelevant to delinquency" (1969, p. 212) because the it "fails to instill in its members love for their neighbors and because belief in the possibility of pleasure and pain in another world cannot now, and perhaps never could, compete with the pleasures and pains of everyday life" (pp. 212-213). This last conclusion in their study is what really sparked replies from numerous researchers. Previous

studies had suggested that children who attended church regularly, or had higher degrees of piety, were somewhat less likely to be delinquent when compared to infrequent or less pious attendees (Glueck & Glueck, 1950; Nye, 1958; Travers & Davis, 1961). These conflicting results undoubtedly created a surge in efforts to try and unravel the association between religiosity and delinquency.

Subsequent studies used data from various locations around the country in an effort to try and understand the counterintuitive findings of Hirschi and Stark (1969). One such study by Burkett and White (1974) postulated that perhaps going to church and believing in God may help prevent delinquent activities just as much as secular activities, such as school athletics, with the same amount of dedication. They found that religious participation appeared to be more closely and negatively related to some kinds of delinquent behavior – such as the use of alcohol and marijuana as non-victim crimes – than to other kinds of delinquent behavior previously analyzed. Unfortunately, there was still an inability to find a clear and solid link between religion and delinquent behavior.

The use of religious importance as a measure for adolescents was emphasized as an important modification because Americans tend to over-report church attendance which may have muddied the waters for previous studies such as Hirschi and Stark in 1969 (Hadaway, Marler, & Chavez, 1993). There is a crucial difference between church attendance and church importance in an adolescent's life that has been accounted for in the present study. While some adolescents face resource constraints in actually getting to a religious service, many adolescents are largely dependent on their parents for transportation and many early adolescents attend religious services not because they are highly religious but because their parents require them to attend.

With inconsistent relationships between religion and secular behaviors (Burkett & White, 1974) for various denominational subgroups (Burkett & White, 1974; Cochran, Beeghley, & Bock, 1998; Higgins & Albrecht, 1977), some suggested that the research up until this point was flawed or atheoretical in nature (Cochran, 1989). Increased use of theory and statistical rigor has since led to more thorough examination of the relationship between religiosity and delinquency. It even has led some researchers who were once skeptical about the conventional hypothesis to view religion as having “truly potent effects” (Stark, 1984, p.273). Even so, it is still imperative to understand that religion is merely one part of a larger set of influences that may inhibit anti-social behavior that include, but are not limited to an adolescent’s family, peer group, or school environment that can affect change and guidance in their life.

Current directions. As more research began to support and solidify the claim of the conventional hypothesis, Stark (1996) wanted to figure out how it was possible that an individual’s religiousness could attenuate or have no significant effect upon adolescent delinquent behavior. He reasoned that religion might not be an individual trait but rather a “group property” (Stark, 1996, p. 164) that had active input from the social environment around the adolescent. In other words, group dynamics and context mattered. Stark (1996) also realized that both Hirschi and Stark (1969) and Burkett and White (1974) were focused on the Pacific Northwest where religion might not have been as influential on the population as in other parts of the country. If context mattered, then observers might have also found that parenting standards were related to adolescent moral or ethical beliefs.

According to Petts (2009), family and religion are factors that are closely tied together and may work together to shape future delinquency trajectories and to deter youth from becoming involved in delinquent behavior earlier in life. In fact, Petts’ research showed that

residing with two parents may deter youths from becoming involved in delinquent behavior and that those who reside with single parents are 34% more likely to become involved in early adolescent-limited delinquent behavior (Petts, 2009). There is further evidence to suggest that family and religion interact to enhance the effect of parental affection in mitigating increased levels of delinquent behavior among youths in single-parent families (Petts, 2009). In addition to religion mitigating delinquency, other factors such as academic ambition, scholarly performance, and the internalized belief that crime is wrong could also inhibit delinquency for both sexes (Gottfredson & Hirschi, 1990; Petts, 2009).

The participation and involvement in religious activities may also have a positive benefit on those who are involved. Smith (2003) argues that religion may exert both positive and constructive influences in adolescents through moral order, learned competencies, and social and organizational ties. These positive influences are ideally assisted through social attachments to other members of the religious community for support or further reinforcement of those ideals (Smith, 2003). However, due to conflicting messages in today's world from parents, peers, and the media, the actual moral beliefs that adolescents adopt could be all, some, or none of the values concerning the wrongfulness of delinquent behavior (Desmond, Soper, Purpura, & Smith, 2009).

Even if religiosity does not create concrete moral beliefs, it facilitates the creation of social capital and embeds youth in a network of religious adults who can monitor and counsel adolescents on their behavior to create a buffer against delinquent peers and potentially poor environments (Desmond et al., 2009; Petts, 2009; Smith, 2003). Religion, therefore, could also act as a protective measure; for example, in low-self control individuals who would participate in antisocial behavior (Laird et al., 2011). Zimmer-Gembeck and Helfand (2008) also found that

while the onset of first sexual intercourse was strongly associated with alcohol use, delinquency, and school problems, religious attitudes were associated with the delay of first sexual intercourse until after the age of 18 in adolescents. Based on social attachment, religious families can enhance supportive parenting practices by increasing social control and exposing adolescents to a broader religious community that reinforces the values taught at home (Petts, 2009). This continuation of family standards outside of the home provides consistency across multiple domains of an adolescent's life. A supportive family structure emphasizes how context is important for religion's deterrent effect when adolescents are enmeshed within a religious community that shares similar beliefs (Stark, 1996). For example, when mothers found religiosity to be an important fixture of their day, they would attend services more often, which led to greater adolescent importance and attendance at religious activities and gatherings (Laird et al., 2011). As can be seen, the role of parental guidance is important when assessing children's religious commitment as religion potentially enhances the effect of parental affection in deterrence.

Theoretical Background

In the proposed study, progress from the most recent adolescent judgment and decision making theories is used to explore a mechanism between religiosity, gist-based information processing, and adolescent delinquent behavior. Some of these theories attempt to explain the developmental trajectory of how processing and retrieval of information changes over the lifespan.

Dual-process theories and decision making. Several current theories of rationality emphasize dual processes in reasoning and decision making (Kahneman, 2003; Klaczynski, 2005; Sloman, 1996). In these dual process models two systems of reasoning are described. The

first system is a fast, associative, and intuitive process while the second system is a much slower, deliberative, and analytical than the first. Researchers have speculated that the first system is evolutionarily older and more susceptible to bias and misleading notions, while the second, being more deliberative and analytical, is a more recent development in the evolutionary chain that incurs a time penalty due to the increase in deliberation (Reyna & Farley, 2006). Standard dual-process theories such as these are unable to provide mechanisms that predict some inconsistent responses under well-specified conditions (Reyna, 2004).

Although it was originally assumed that adolescents perceived themselves to be invincible, which led to increased risk taking, this conjecture has since been contradicted by recent findings that suggest adolescents actually overestimate important risks (Reyna & Farley, 2006). One approach to understanding adolescent behavior is to look at how this group makes decisions and processes risk since people think about this concept in many different ways (Stanovich & West, 2000). Typical dual-process theories are unable to predict that when compared to those who rely on basic intuition, adolescents who weigh risks and benefits by analyzing the risky options actually take more risk and have inferior outcomes (Mills, Reyna, & Estrada, 2008; Reyna & Brainerd, 2011; Reyna, Estrada et al., 2011; Reyna & Farley, 2006). Appropriate developmental models need to account for this counterintuitive finding when explaining adolescent behavior.

In contrast to the aforementioned theories, fuzzy-trace theory sees the fast intuitive aspect not as a primordial system, but rather as an advanced form of reasoning which develops over the lifespan alongside the more analytical deliberation (Reyna & Brainerd, 2011; Reyna & Brainerd, 1995). This theory helps to provide an explanation for why human decision making seems simultaneously impulsive and reflective, intuitive and analytical, as well as qualitative and

quantitative decisions (Reyna & Farley, 2006). Possessing both fast and slow methods makes decision making and information processing unique events. Accounting for both intuitive and analytical processes, fuzzy-trace theory is also better able to explain counterintuitive research findings that have emerged regarding adolescent behavior. As a result, the current study will be using fuzzy-trace theory to help explain the underlying mechanism in the relationship between religion and delinquency for adolescents.

Fuzzy-trace theory. The assumptions of fuzzy-trace theory are based on memory, judgment, and decision making research that takes into account social, cognitive, affective, and developmental factors (Reyna & Brainerd, 2011; Reyna, Estrada et al., 2011; Reyna & Farley, 2006). These assumptions allow predictions across multiple developmental stages that account for developmental trends as well as counterintuitive findings.

Fuzzy-trace theory predicts that people encode multiple representations of an event at varying levels of precision lying on a continuum from verbatim to gist (e.g., Reyna & Brainerd, 2011; Reyna & Kiernan, 1994). This encoding process can be likened to a camera: several pictures are captured at a variety of distances and exposures in order to ensure different qualities of the scene are captured. Verbatim representations preserve surface details and the “facts” of the experience such as the exact qualities of numerical information. Fuzzy gist representations on the other hand, preserve the essential meaning and essence which could be influenced by culture, education, development, atmosphere, and other factors known to affect interpretation (Reyna & Brainerd, 1995).

Gist is similar to the first system in dual process models in that it acts in a fast, associative, and intuitive manner. Verbatim is slower, more deliberative, and analytical in manner and can be related to the second system. However, unlike traditional dual-process

models, gist-based reasoning is considered to be advanced than analytical reasoning (e.g., Reyna & Ellis, 1994; Reyna & Lloyd, 2006). An “advanced” form of reasoning is based on coherence and correspondence (or accuracy) criteria (Adam & Reyna, 2005; Reyna & Adam, 2003). Together, verbatim and gist representations are processed in parallel during encoding, storage, and retrieval processes (Reyna & Brainerd, 1995).

Fuzzy-trace theory stipulates that decision makers rely on the lowest, or least precise, level of gist necessary for the current task at hand (Reyna & Brainerd, 1995; Reyna, Lloyd, & Brainerd, 2003). For example, making a choice between two objects requires a dichotomous representation of preference while making a judgment of those objects requires making a more meticulous level of distinction. The brain is extremely efficient at adapting to the resources demanded for a judgment or preference so as not to waste unnecessary capacity by processing extraneous information. Fuzzy-trace processing has advantages for reasoning, because gist representations are more stable over time and easier to think about compared to verbatim representations (Reyna & Brainerd, 1992). After a delay of several months, the verbatim memory of the material that was once learned has mostly disintegrated whereas gist representations of previous memories remain accessible.

Both verbatim- and gist-based intuition begin to develop during childhood and continue on through adolescence, with the later sometimes developing at an even faster rate than the former (e.g., Brainerd, Reyna & Zember, 2011). Encouraging adolescents to recognize the gist of common risky situations has the potential for longer-lasting effects on behavior than standard interventions that place more emphasis on verbatim details (Reyna & Farley, 2006).

According to fuzzy-trace theory, qualitative representations such as “avoid risk” are likened to gist-based decision making, while quantitative representations are similar to verbatim-

based decision making where risks and benefits are weighed and traded (Reyna, 2004). When decision makers weigh risks and benefits, objective risk can be often overlooked because the magnitude of benefits trumps the magnitude of risks if the decision maker is thinking quantitatively (Mills et al., 2008). On the other hand, qualitative assessment takes into account the global risk and ignores the precise magnitude of potential benefits which leads to less risk taking (Reyna & Ellis, 1994; Reyna & Farley, 2006). Adult decision makers, who are older than adolescents and have usually had more experience making decision, have been shown to represent qualitative rather than quantitative processes (Reyna & Brainerd, 1995). Gist-based intuition, which is often associated with a sign of maturity, produces risk avoidance while deliberation, the evaluation of alternatives, encourages risk taking (e.g., Reyna et al., 2005). In a study associating categorical gist (“No risk is better than some risk”) and ordinal risk (“Less risk is better than more risk”) with adolescent risk-taking, ordinal perceptions of risk positively correlated with risky behavior while gist in categorical terms negatively correlated with risky behavior (Mills et al., 2008). Overall, conceptualizing gist in categorical terms provided the greatest protection against risk taking (Mills et al., 2008). A general theme through all of these analyses is that making finer-grained distinctions and conceptualizing levels of risk in ordinal terms often leads to more risk taking behavior.

Researchers have subdivided gist representation statements into how they conceptualize risk. Categorical terms, such as “no risk is better than some risk”, and ordinal terms, such as “less risk is better than more risk” were the two main categories that were used in the present study (Mills et al., 2008). These statements describe the same relationship that more risk is bad, but are framed in absolute versus relative terms respectively. It was found that participants who endorsed the absolute principle were also more likely to endorse the relative version of the same

principle (Mills et al., 2008). Endorsement of the absolute principle is associated with behavioral intentions to take fewer risks while endorsement of the relative statement produced the opposite intentions (Mills et al., 2008). Based on fuzzy-trace theory's assumptions and the conceptualization of religious commitment, there is reason to believe that religion possesses a relationship with absolute and relative statement endorsement.

Religion and dual-process theories. “Religion is one source of ‘moral directives,’ but it is not the only one, so ‘American youth’ ...find themselves living within and between multiple orders among which they have to negotiate, balance, compromise, and choose” (Smith, 2003, p. 25). Some researchers argue that religious traditionalists possess radically different worldviews regarding the ultimate nature of morality in comparison to secular and religious progressives (Hunter, 1991). These drastically different worldviews could also be the result of strong personality traits.

When observing how religion interacts with personality, Streyffeler and McNally (1998) found that fundamentalists scored significantly lower than liberals on the dimension of openness to experience. This finding suggests that relative avoidance of diverse experiences and ideas in the fundamentalist group expanded across multiple domains and was not only confined to religious issues. This lends support to the idea that absolute or relative processing is a potential factor in the relationship with religion.

As Patton (May 17, 2011) explained, the more religiously fundamentalist a person is, the more black and white issues become. Conversely, the more religiously liberal a person leans, the more the line between adherence to religious teachings and doctrines begins to blur creating a gray area that is subjective and based on a person's own understanding of religious doctrine. The views of the fundamentalist are similar to the absolute statement, “no risk is better than some

risk,” due to the more definitive separation between risk and no risk. Parallels could also be drawn between how the religious liberal perceives the world and the relative statement, “less risk is better than more risk.” The relative statement is a much looser principle in that a person can place this along a wider area on a hypothetical risk scale, with no risk on one end and tremendous risk on the other.

Religious commitment could also be applied here, in that acknowledgement and personal acceptance of religious doctrine will have an impact on attempted adherence to religious beliefs and values. Increased commitment assumes goal-striving and the knowledge of what is acceptable according to religious doctrine and beliefs. When increased commitment is present, there is no practical need to deliberate between finer points when the decision maker knows that the act or thought would be unacceptable. This all-or-none conceptualization is representative of gist-based processing.

An example of this gist-based understanding can be seen in the Holy Bible. In Matthew 18:21-22 (New International Version) it says, “Then Peter came to Jesus and asked, ‘Lord, how many times shall I forgive my brother or sister who sins against me? Up to seven times?’ Jesus answered, ‘I tell you, not seven times, but seventy-seven times.’” Jesus was making a reference to the rabbis’ teachings that a person should forgive someone up to three times and after that they would not have to forgive any longer as described in Amos 1:3, “For three sins of Damascus, even for four, I will not relent,” and Amos 2:6, “For three sins of Israel, even for four, I will not relent.” It is often taught that Jesus was not saying a person should increase the number of times they forgave someone to seventy-seven. Rather, “disciples who are humble should not limit the number of times they forgive one another nor the frequency with which they forgive each other” (Constable, 2010, p. 261).

This is but one example that emphasizes gist-based teaching in the Christian faith. According to Kohlberg (2008), most people are at the conventional level of moral development where they attempt to maintain specific social order, fixed rules and authority. This construal is often related to literal interpretation of the rules and commandments set forth in scripture. However, non-literal interpretation of scripture may begin to stray into the realm of post-conventional thought where rationalizations are made between conflicting principles (Kohlberg, 2008). While verbatim memorization is encouraged, the purpose behind that type of memorization is to form a greater love and communion with God, not solely for literal interpretation of scriptural passages (Piper, 2006). The rationalization between religious laws and the world creates a non-literal gist emphasis, which is different than a literal interpretation of the laws and commandments in scripture.

Delinquency and dual-process theories. Various health and safety problems are by-products of how people perceive and reason about risk (Reyna, 2004). Gullone and Moore (2000) found that risk behaviors correlated less with personality than they did with risk judgments and that risk judgments were the most important factor in explaining variance in behavior. Therefore, in terms of fuzzy-trace theory, a better predictor of risk-taking behavior than personality characteristics would be the endorsement of an absolute or relative statement about risk.

Many forms of delinquent behavior could also be categorized as risky behavior due to the threat of punishment by society and/or the potential health consequences as a result of delinquent behavior. Since many delinquent behaviors are risky, fuzzy-trace theory may offer an explanation for the reasoning processes behind those actions. When gist-based reasoning was triggered with retrieval cues in questions, measures of intentions to have sex, sexual behavior,

and the number of partners decreased (Reyna et al., 2011). However, when verbatim-based reasoning was triggered, measures of intentions to have sex and the number of partners increased (Reyna et al., 2011). Since people think about risk and religion in different ways, it would seem ideal to apply a dual-process model, such as fuzzy-trace theory, to predict behavioral intentions given the relationships between religion, reasoning, and delinquency.

Study Purpose

The general aim of the present study was to corroborate the relationship between religion and adolescent delinquent behavior and to investigate mechanisms that affected the relationship between religion and adolescent delinquent behavior. A potential mechanism of fuzzy-trace theory, in terms of absolute and relative statement endorsement, was explored between religious commitment and frequency of delinquent behavior. Other factors such as family structure and race were included as possible alternative explanatory variables. I predicted that the increased use of categorical gist-based processing would explain unique variance in addition to the protective effect of increased religious commitment on delinquent activity and that the use of categorical gist-based processing might also mediate the effect of religious commitment on delinquency.

CHAPTER 2

Methods

Participants

This study used a preexisting dataset from a longitudinal study conducted from June 2003 to April 2008. Participants were recruited from high schools and local youth organizations in or around a 30 mile radius of Tucson, Arizona, Arlington, Texas, and Ithaca, New York. In Tucson, Arizona, participants were recruited from Marana high school, Mountain View high school, and Salpointe Catholic high school. In Dallas, Texas, participants were recruited from the Dallas Boys and Girls Club. In the Arlington, Texas area, participants were recruited from Arlington, Lamar, Martin, Juan Seguin, Sam Houston, Bowie, Cedar Hill, O.D. Wyatt, Barnett, Gateway, Grand Prairie, Turning Point, Hutcheson, and Venture high schools as well as Gospel Light Baptist School. In Ithaca, New York, participants were recruited from Ithaca High School.

Participants were selected for recruitment if they were high school students between the ages of 14 and 19 and could speak and understand English. There were 837 participants who were eligible to participate in the study. However, 30 participants were removed due to “incoherent responses” which brought the participant total to 807 ($M_{\text{age}} = 15.47$ years, $SD = 0.96$, 59.2% female, 45% Caucasian/White, 15.7% Mexican, Central, or South American, 27.8% African-American/Black, and 11.5% Other). Only 16 participants were over eighteen years of age, which was about 2% of the entire sample size. Incoherent responses included surveys whose participants provided a pattern of logically inconsistent answers that confounded the data and so were excluded from the analysis (e.g. claiming lifetime abstinence while having previously claimed that they had sex).

Research Design

Participants took a 314 item pre-survey followed by one of three 16 hour intervention curricula. The survey contained 314 items which ranged from demographics to delinquent behavior and sexual activity. Participants then completed a follow-up survey (post-survey) immediately after the intervention. Additional surveys were also administered at three, six, and twelve months after the post-survey for a total of five time points. However, for this study, only the pre-intervention survey data was analyzed to examine relationships between religious commitment and delinquency.

Measures

Religious commitment (aggregate). A scale was created from the sum of three measures of religious commitment. Participants were asked to respond to the question “How important would you say religion is to you?” on a 5-point Likert scale with “Not At All Important” coded as 0 to “Very Important” coded as 4. The other two statements were presented under the heading, “In the last six months, how often have you done the following?” with a five point Likert-scale from “Never” to “Almost every day”, with the former being coded as a 0 and the later being coded as a 4. Participants were asked about how often they had “Taken part in church-sponsored or religious activities or youth groups,” and “Attended a religious or spiritual service (e.g. church or synagogue).” An additional item, not included in the religious commitment scale, asked participants to report how often they had “Been in after school activities or clubs (for example, sports, debate team, drama club).”

This scale served to address the aforementioned issue discussed by Hirschi and Stark (1969) in that they had only accounted for church attendance when measuring religiosity. This scale is an alternative means for simply categorizing groups along a fundamentalist continuum

while still allowing adolescents to rate the importance of religion and the frequency of attendance at religious activities (Vaughan et al., 2001; Laird et al., 2011).

The validity of single-item measures of religiosity have been demonstrated by Gorsuch and McFarland (1972). There are differences in individual religious items. For example, Laird et al. (2011) found that although religious importance and attendance were strongly correlated, only religious importance was associated with antisocial behavior and only religious importance moderated the effect of low self-control on antisocial and rule-breaking behavior. Instead of limiting the survey to single-item measures, several highly related questions were combined to capture a more comprehensive effect of religious commitment.

According to Jensen and Erickson (1979), it was also important to consider a range of denominations when analyzing religion. For the current study, participants responded to questions about their religious affiliation: “Catholic”, “Protestant (Methodist, Lutheran, Baptist, etc.)”, “Jewish”, “Born-again Christian”, “Latter-Day Saints (Mormons)”, “Other”, and “No religion”.

Delinquency. Various antisocial activities were selected that have been used in prior literature. Delinquent behavior is indicated by seven self-reported measures on whether the youths, in the past six months, have stolen something, skipped school (ditching), damaged property / graffiti (tagging), smoked cigarettes or chewed tobacco, smoked marijuana (pot), used illegal drugs such as cocaine, methamphetamines or LSD (this does not include prescribed medicine), and / or drank alcohol (beer, wine or hard liquor). These items were presented on a five item Likert-scale ranging from never to almost every day. In addition to these activities, underage risky sexual behavior was included which was comprised of 4 individual items that assessed risky sexual behavior. Three of these items asked participants to respond yes/no if they

had “fooled around above the waist”, “fooled around below the waist”, and if they had “ever had sex” (responses were coded 0 for no / 1 for yes). The fourth item asked participants how many partners they “had ever had sex with.” Taking these four items together, a monotonic sexual behavior scale variable was created by giving coding participants based on the riskiness of their sexual behavior (scores were from 0 to 4 matching the other delinquency items; $\alpha=.81$). If participants had never participated in any of these behaviors they were coded as a 0, if they had (only) fooled around above the waist they were coded as a 1, if they had (at most) fooled around below the waist but never had sex they were coded as a 2, if they had sex with (at most) 1 person they were coded as a 3, and if they had sex with two or more partners they were coded as a 4. Together the seven items, including the sexual behavior scale, were summed to create an aggregate delinquency scale of eight items (responses were coded 0 to 4 and summed; $\alpha=.79$). The delinquency scale items include measures for “victim” crimes (e.g., stealing, property damage/graffiti, and arguably underage sexual behavior) and “victimless” crimes (e.g., skipping school, using tobacco, smoking marijuana, using illegal drugs, and drinking alcohol) (Burkett and White, 1974; Desmond, Soper, Purpura, & Smith (2009).

Other factors. In addition to religiosity and delinquency, questions were asked about participant’s gender, race, age, year in school (grade), living situation at home (i.e., “Where do you live right now?”; both parents, one parent, parent and step-parent, part time with both, other relatives, group home, foster family, one their own), participation in free school lunch program, school grades, parental education levels, prediction about education completion (i.e., “How far do you think you will go in school?”), and adult supervision per day (based on 1-hour increments). These variables are each measured in a straightforward manner.

In terms of race and ethnicity, the survey asks respondents if they are “Caucasian/White”, “Mexican-American/Chicano”, “Central American/South American/Puerto Rican/Cuban”, “African-American/Black”, “Asian-American”, “Native American/Tribe:” (to self complete), and “Mixed Ethnicity (Example Chicano and Native American).”

Fuzzy-trace theory. In order to test for a more finely grained prediction about the levels of gist at work in the relationship between religious commitment and delinquency, a similar method to Mills et al. (2008) was used. Participants had the option of endorsing two principles: “No risk is better than some risk” and “Less risk is better than more risk.” The absolute and relative risk statements, respectively, assess the tendency to process gist in a more precise or imprecise manner. Participants had the option of endorsing neither, one, or both of these terms.

Individual difference scales. Two additional psychosocial scales were utilized. The extent to which the participant is accepted by his or her peers was assessed with the Index of Peer Relations (Nurius, Hudson, Daley, & Newsome, 1988), a 25 item scale with items such as “I get along very well with my peers”, rated on five point scales ranging from “Rarely or none of the time” to “Most or all of the time” (scored from 1 to 5 and averaged; $\alpha=.94$). A short form of the Marlowe-Crowne social desirability index (Reynolds, 1982) was also administered. Participants provided “True” or “False” responses to 13 items such as “No matter who I'm talking to, I'm always a good listener” (responses were coded 0 or 1 and averaged; $\alpha=.66$).

Analyses

Analyses and data management were performed using IBM SPSS Statistics, version 19 (SPSS Inc, Chicago, IL). Descriptive statistics were calculated to characterize socio-demographic, psychosocial, and behavioral variables across conditions. Differences between delinquency items were examined with ANOVA and χ^2 analyses for continuous and categorical

variables, respectively. Logistic regression models were used to analyze the effects of a set of explanatory variables on a non-interval scale dependent variable, such as the dichotomous or binary absolute and relative statement variables, in an analogous manner to a standard linear regression but without violating the conditions necessary to satisfy ordinary least square estimation while still addressing the need for an appropriate functional regression form.

Unless noted otherwise, age was in years, the reference group for ethnicity was Caucasian/other, the reference group for gender was male, and the reference group for endorsement of the fuzzy-trace theory statements was no endorsement.

The aim of the analysis focused on investigating an empirical relationship between religiosity and delinquency while observing how the endorsement of risk statements (absolute / relative) serve to influence the established relationship between religion and delinquency by mediating or moderating the relationship. It was important to try and replicate previous findings between religiosity and delinquency. Adolescent risk assessments were then used to investigate possible influences on delinquent behavior as well as the relationship between religion and delinquency.

CHAPTER 3

Results

Religious Commitment (Aggregate) & Delinquency

The aggregate religious commitment score was a combination of three closely related items (religious importance, frequency of attendance at religious services, and frequency of attendance at religious activities). These religion items were combined in order to assess a broader spectrum of religious commitment beyond simply attendance or simply rating religion as very important ($M=5.51$, $SD= 3.17$, $\alpha=.76$). The same reasoning was used when combining the delinquency items into a scale in order to assess possible delinquent behavior from individual drug use to underage sexual behavior adolescents had the potential to participate in ($M=5.27$, $SD=4.95$, $\alpha=.81$). A significant relationship was found between the aggregate religious commitment scale and the aggregate delinquency scale which was similar to previous research (e.g. Baier & Wright, 2001; Burkett & White, 1974; Cochran, 1989; Higgins & Albrecht, 1977). Together, both scales allowed for the analysis of potential mechanisms within their relationship.

Correlations. While there was a weak to moderate bivariate correlation between the aggregate religious commitment scale and the aggregate delinquency scale, larger magnitude correlations were found between the importance of religion item and the aggregate delinquency scale. When individuals score higher on the aggregate religious commitment scale, their aggregate delinquent behavior decreases a low to moderate amount, Pearson's $r(807) = -.20$, $p < .00$ and Spearman's $r(807) = -.18$, $p < .00$. Subjects who scored higher on the aggregate religious commitment scale also reported significantly less delinquent participation for all of the individual delinquency items except frequency of damaging property and graffiti/tagging as

illustrated in Table D.7. Due to the measurement difference in the sexual behavior delinquency item in comparison to the other seven individual delinquency items, it was excluded from several comparative analyses to check for variations in results. Upon exclusion of the sexual behavior item, a similar relationship was still present between aggregate religious commitment and aggregate delinquency, Pearson's $r(807) = -.20, p < .00$; Spearman's $r(807) = -.17, p < .00$.

When the aggregate religious commitment scale was broken down into the three individual items, the magnitude of the bivariate correlation varied per specific item. When the item "How important would you say religion is to you?" was presented, subjects who rated religion as more important in their lives also tended to report less delinquent behavior on the aggregate delinquency scale, Pearson's $r(807) = -.27, p < .00$; Spearman's $r(807) = -.26, p < .00$. Again, the aggregate delinquency scale without the sexual behavior item resulted in similar significant results Pearson's $r(807) = -.28, p < .00$; Spearman's $r(807) = -.27, p < .00$. The importance of religion produced larger significant negative correlations with all of the individual delinquency items than the aggregate religious commitment scale as illustrated in Table D.7. Greater frequency of participation in religious services was also related to decreases in aggregate delinquency regardless if the sexual behavior item was included, Pearson's $r(807) = -.15, p < .00$; Spearman's $r(807) = -.13, p < .00$, or not included, Pearson's $r(807) = -.15, p < .00$; Spearman's $r(807) = -.13, p < .00$, respectively. More participation in religious services was also related to decreased participation in most delinquent activity except stealing, damaging property/graffiti, and using illegal drugs. More participation in religious activities, unlike the other two individual items, was related to a very small decrease in delinquent behavior, Pearson's $r(807) = -.07, p < .03$; Spearman's $r(807) = -.04, p > .26$. However, the negative relationship between participation in religious activities and aggregate delinquency was no

longer significant when sexual behavior was excluded from the aggregate delinquency scale
Pearson's $r(807) = -.07, p > .06$; Spearman's $r(807) = -.03, p > .36$.

These results have also shown that removing the sexual behavior item from the aggregate delinquency scale not only reduces the Cronbach's Alpha only .01 from $\alpha=.80$ to $\alpha=.79$ but also produces no significant coefficient changes between aggregate religious commitment and aggregate delinquency in the Pearson's rho (including sexual behavior: $r = -.20, p < .00$, and excluding sexual behavior: $r = -.20, p < .00$) and only a slight change in the Spearman's rho (including sexual behavior: $r = -.18, p < .00$, and excluding sexual behavior: $r = -.17, p < .00$).

Religious Denominations

Participants were asked to identify if they were affiliated with any religious denomination. There were 28.9% who identified as Protestant, 22.8% identified as Catholic, 19.2% as Born-Again Christian, 15.6% as not possessing any religion, 10% as other, 2% as Mormon, 1.2% as Jewish, and 0.2% as no response. These responses were re-coded and denominations with few responses were collapsed to create a group size that served as a better comparison group. Protestants (28.9%), Catholics (22.8%), Born-Again Christians (19.2%), and participants claiming no official religious affiliation (15.6%) remained the same while "Other" religious affiliations increased (13.3%).

Denominations and religious commitment. One way the denominations were assessed was by each group's degree of religious commitment. Using a univariate ANOVA, $F(4,800) = 68.20, p < .00, \eta_p^2 = .25$, each of the five recoded denominations were ranked based on their mean religious commitment. Born-Again Christians and Protestants scored the highest on religious commitment, $M=7.75 (.22), n=155$, and $M=7.59 (.8), n=233$ respectively. Participants who identified with other religious denominations and affiliations, $M=6.92 (.27), n=107$, had a

significantly lower mean than the Born-again Christian or Protestant group. Catholics were also significantly lower than Born-Again Christians and Protestants in terms of religious commitment, $M=6.27 (.20)$, $n=184$. Participants claiming no formal religious affiliation were the lowest, $M=3.04 (.25)$, $n=126$.

To determine if there was a significance difference in simply being religious or not, a religious group and a non-religious group were combined and compared, $F(1,803) = 231.11$, $p < .01$, $\eta_p^2 = .22$. The religious group, $M=7.16 (.11)$, was significantly more committed than the non-religious group as expected, $M=3.04 (.25)$.

Denominations and religious importance. Denominations were also analyzed based on how they as a group viewed religious importance in their lives. A univariate ANOVA was again employed and used to analyze the mean rating of religious importance, $F(4,800) = 81.27$, $p < .00$, $\eta_p^2 = .29$. The Born-Again Christian group, $M=3.00 (.09)$, as well as the Protestant group, $M=2.89 (.07)$, rated the importance of religion significantly higher than other denominations and affiliations, $M=2.56 (.11)$, as well as Catholics, $M=2.56 (.08)$. The non-religious group expectedly rated religious importance the lowest out of all five groups, $M=.89 (.10)$.

When the groups were separated into religious and non-religious categories, there was a substantial difference between the religious importance of the two groups, $F(1,803) = 299.01$, $p < .00$, $\eta_p^2 = .27$. The religious group had a much higher mean of religious importance, $M=2.77 (.04)$, than the non-religious group, $M=.89 (.10)$. Despite this difference, the non-religious group still had an average positive response to the importance of religion in their lives.

Denominations and delinquency. With religious importance and commitment in mind, it was important to analyze the frequency of delinquent activity that each denomination reported in comparison to their religious commitment. This was achieved by performing a univariate

ANOVA with all five denominations and aggregate delinquency, $F(4,800) = 2.56, p < .04, \eta_p^2 = .01$. The non-religious group had the highest occurrence of delinquent behavior out of any of the religious denominations, $M=6.29 (.44)$. Other religious denominations and affiliations followed behind them, $M=5.40 (.47)$. Catholic, $M=5.01 (.36)$, Protestants, $M=4.87 (.32)$, and Born-Again Christians, $M=4.57 (.39)$, reported less frequent delinquent behavior.

When comparing religious and non-religious groups, groups identifying as non-religious committed more frequent delinquent behavior than their opposing group. Non-religious participants had an average frequency of delinquent behavior of 6.29 (.44) while religious groups had an average frequency of 4.92 (.19). The analysis was very significant, $F(1,803) = 8.34, p < .00, \eta_p^2 = .01$, and demonstrated that there existed a difference in delinquency between religious and non-religious groups.

When aggregate delinquency without the sexual behavior item was used, similar results were found. When comparing the average aggregate delinquency for the five religious denominations, significant differences were still present between the groups, $F(4,800) = 3.50, p < .01, \eta_p^2 = .02$. The Non-religious groups had the highest frequency of delinquent behavior, $M=4.44 (.36)$, while the other religious groups, $M=3.56 (.39)$, and Catholics, $M=3.47 (.29)$, followed behind. Protestants, $M=3.10$, and Born-Again Christians, $M=2.76 (.32)$, had the lowest levels of delinquent behavior even when the sexual behavior item was removed from the aggregate scale.

When comparing religious and non-religious groups to the aggregate delinquency scale without the sexual behavior item, there still existed a significant difference in delinquent behavior, $F(1,803) = 10.20, p < .00, \eta_p^2 = .01$. The non-religious group participated in more delinquent behavior, $M=4.44 (.36)$, than those claiming a religious affiliation, $M=3.20 (.15)$.

Removal of the underage sexual behavior item still produced a similar trend in delinquency activities by denomination.

Comparing denominations against religious commitment. Using logistic regressions to identify relationships with the endorsement of the absolute and relative statements suggested that aggregate religious commitment was a better predictor of absolute statement endorsement than denominations, religious importance, or identifying as religious. These results also showed that religious importance produced different results when predicting absolute or relative endorsement.

When aggregate religious commitment and religious affiliation (Catholic, Protestant, Born-Again Christian, other, and no religion) were analyzed using logistic regression, only aggregate religious commitment was found to be a significant factor in predicting endorsement of the absolute statement, $B=.09$, $SE B=.03$, $p<.00$. This suggested that as religious commitment increased so too did endorsement of the absolute statement. Neither religious commitment nor denomination significantly related with endorsement of the relative statement.

When comparing participants who had a religious affiliation with those that didn't (religious or non-religious groups), an increase in aggregate religious commitment was associated with a significant increase in the endorsement of the absolute statement, $B=.09$, $SE B=.03$, $p<.00$. Aggregate religious commitment was not significantly related to the endorsement of the relative statement.

When the five religious affiliations and the importance of religion were used to predict absolute and relative endorsement, only religious importance emerged as a significant predictor of the relative statement endorsement. As religious importance increased, the endorsement of the

relative statement decreased, $B=-.14$, $SE B=.06$, $p<.03$. The five religious affiliations had no significant affect on endorsement of the absolute or relative statements.

When the importance of religion to participants was compared with those who identified as religious were analyzed, identifying as religious was the only significant predictor of relative statement endorsement, $B=-.14$, $SE B=.06$, $p<.02$. Religious importance did not significantly relate to endorsement of either the absolute or relative statement.

In order to help summarize the findings, both religious importance and aggregate religious commitment were analyzed in a logistic regression to predict endorsement of the absolute and relative statements. The results showed that an increase in aggregate religious commitment was positively related to an increased endorsement of the absolute statement, $B=.12$, $SE B=.23$, $p<.01$. Religious importance was not significantly related to endorsement of the absolute statement, but it was significantly related to the endorsement of the relative statement. As religious importance increased, the endorsement of the relative statement decreased, $B=-.19$, $SE B=.09$, $p<.03$.

As a result, denominations were significantly different in terms of aggregate religious commitment and frequency of delinquent activities. However, they were not significant predictors of endorsing the absolute or relative statements. Instead, aggregate religious commitment was found to be a better predictor of endorsing the absolute and relative risk statements.

After School Activity and Other Factors

After school activity. There is a common notion that participation in extracurricular activities, especially those that occur after school, would help to reduce the amount of delinquency in adolescents (e.g., Gottfredson, Gerstenblith, Soulé, Womer, & Lu, 2004). Since

this might serve as an alternative possibility to explain adolescent delinquency, it is important to compare the effect of after school activities with that of religious commitment. It might also be advantageous to evaluate the relationship between aggregate religious commitment and delinquent behavior while controlling for the amount of time that adolescent spend without adult supervision.

Correlations. The first analyses conducted were bivariate correlations to establish significant relationships with the aggregate delinquency scale and individual delinquency items. When the frequency of after school activity was correlated with these items, a significant relationship was found. As the frequency of after school activity increased, the frequency of aggregate delinquent behavior decreased, Pearson's $r(807) = -.17, p < .00$; Spearman's $r(807) = -.13, p < .00$. This was still significant when the frequency of underage sexual behavior was removed from the aggregate delinquency scale as well, Pearson's $r(807) = -.17, p < .00$; Spearman's $r(807) = -.13, p < .00$. Greater participation in after school activities was significantly negatively correlated with decreases in the frequency of stealing, skipping school, tobacco use, marijuana use, drug use, alcohol use, and underage sexual behavior.

In comparison with the aggregate religious commitment scale and the three individual religion items (religious importance, attendance at religious services, and attendance at religious activities) in terms of aggregate delinquency, frequency of participation in after school activities fell in the middle of the religious items. Based on the magnitude of Spearman rho values, religious importance was largest at $r(807) = -.26, p < .00$, aggregate religious commitment was second with $r(807) = -.18, p < .00$, the frequency of after school activity was third with $r(807) = -.13, p < .00$, followed by the frequency of religious services, $r(807) = -.13, p < .00$. As a result,

the importance of religion to a participant had the strongest correlation with aggregate delinquency regardless of the inclusion or exclusion of the sexual behavior item.

Regressions. Several regression analyses were conducted to disambiguate the bivariate correlations conducted previously. The regression analysis (including endorsement of the absolute and relative statements, the aggregate and individual religious commitment items, as well as the frequency of after school activities) produced similar results as the bivariate correlations.

Religious importance produced the largest significant beta values, $B=-.96$, $SE B=.13$, $\beta=-.26$, $p<.00$, while that was followed by the aggregate religious commitment scale $B=-.29$, $SE B=.05$, $\beta=-.19$, $p<.00$. The magnitude of the standardized beta value for the frequency of after school activity was larger, $B=-.47$, $SE B=.11$, $\beta=-.15$, $p<.00$, than the standardized beta values for frequency of religious services, $B=-.53$, $SE B=.14$, $\beta=-.14$, $p<.00$. The frequency of religious activities, $B=-.24$, $SE B=.14$, $\beta=-.06$, $p>.08$, was non-significant.

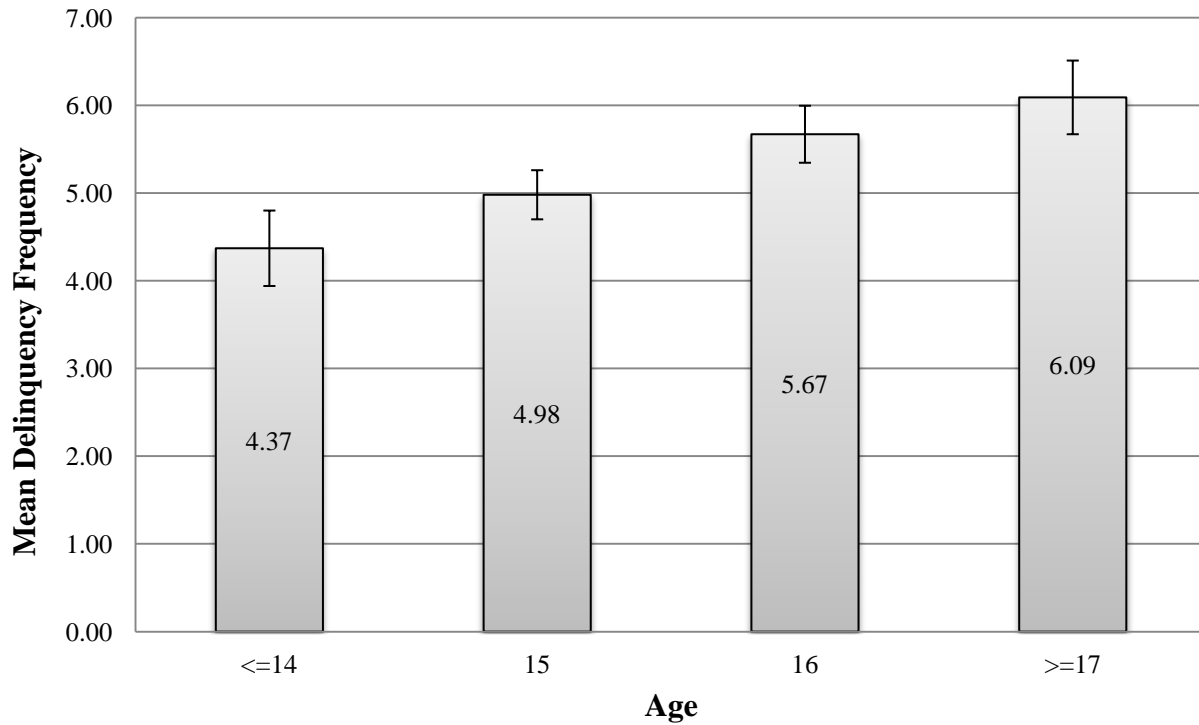
All of these independent variables had negative beta values which suggested that as the frequency of participation in these items increased, the frequency of aggregate delinquent behavior decreased. While after school activity was a significant main effect of aggregate delinquent behavior, it did not possess the largest magnitude beta value. Religious importance, followed by aggregate religious commitment, was a more significant predictor of aggregate delinquent behavior than after school activity alone.

Age. As participants' ages increased the frequency of delinquent behavior increased as well. There were 131 participants less than 14 years of age (16.2%), 307 participants who were 15 years of age (38.0%), 228 participants who were 16 years of age (28.3%), and 141 participants who were 17 years or older (17.5%) in the sample.

A univariate ANOVA showed that there was significant difference between age groups in terms of delinquency, $F(3,803) = 3.58, p < .01, \eta_p^2 = .01$. Fourteen year-olds and younger had the least frequent occurrences of delinquent activity, $M = 4.37 (.43)$, while seventeen year olds $M = 6.09 (.41)$, reported the most as displayed in Figure 3.2.

Additional univariate ANOVAs showed that age was not a significant predictor of absolute statement endorsement, $F(3,803) = .42, p < .74, \eta_p^2 = .00$, and relative statement endorsement, $F(3,803) = .74, p < .53, \eta_p^2 = .00$. Age was also not a significant predictor of aggregate religious commitment, $F(3,803) = .06, p > .98, \eta_p^2 = .00$.

Figure 3.1
Frequency of Aggregate Delinquency and Age



Notes: $F(3,803) = 3.58, p < .01, \eta_p^2 = .01$. The range of the total aggregate delinquency scale was from 0 to 32. Participants 17 years and older committed significantly more frequent delinquent behavior than those ages 15 and 14 years and younger. Participants 14 years and younger committed significantly less delinquent behavior than those who were 16 and 17 years old and older.

Gender. There were significant differences between genders in aggregate religious commitment but not in aggregate delinquency and absolute or relative statement endorsement. There were 329 males (40.8%) and 478 females (59.2%) in the sample population. Univariate ANOVAs showed that gender did not significantly predict absolute, $F(1,805) = 1.21, p < .27, \eta_p^2 = .00$, or relative endorsement, $F(1,805) = 2.89, p < .09, \eta_p^2 = .00$. Additional univariate ANOVA analyses revealed that there was no significant difference in aggregate delinquency between genders, $F(1,805) = .01, p < .95, \eta_p^2 = .00$. However, aggregate religious commitment did vary significantly between genders, $F(1,805) = 9.94, p < .00, \eta_p^2 = .01$. Males had a significantly lower average religious commitment, $M = 6.09 (.17)$, when compared to females, $M = 6.80 (.14)$.

Ethnicity. There were significant differences between ethnicities for delinquent behavior and religious commitment, but not for the endorsement of the absolute or relative statements. Out of the 807 participants in the sample, 127 of them identified as Hispanic (15.7%) and 224 of them identified as African-American (27.8%). Endorsement of the absolute statement, $F(3,803) = .70, p > .55, \eta_p^2 = .00$, and the relative statement, $F(3,803) = .94, p > .42, \eta_p^2 = .00$ were found to not significantly vary between ethnicities. However, there were significant mean differences between some of the ethnicities and delinquent behavior despite the non-significance of the ethnicity variable in general. African-Americans/Blacks, $M = 4.80 (.33)$, were significantly different from Mexican, Central, or South American participants, $M = 5.62 (.44)$, as well as Caucasian/White participants, $M = 5.53 (.26)$. Participants who classified themselves as being of other ethnicities were located in between, $M = 4.90 (.51)$.

African-Americans/Blacks were found to be significantly different from other ethnicities in aggregate religious commitment. The univariate ANOVA was significant, $F(3,803) = 11.00, p < .00, \eta_p^2 = .04$, showing significant differences between ethnicity groups. African-

Americans/Blacks were the most religiously committed ethnicity group, $M=7.48 (.21)$, followed by other ethnicities, $M=6.59 (.32)$, and Mexican, Central, or South American participants, $M=6.24 (.28)$. Caucasian/White participants were found to have the least amount of religious commitment out of all the ethnic groups, $M=5.99 (.16)$.

Free lunch. The use of free lunch as a proxy variable for socioeconomic status was not significantly related to endorsement of the absolute or relative statements, overall delinquency, and aggregate religious commitment. Only 204 participants (25.3%) reported receiving a free lunch from their school. The univariate ANOVA with free lunch did not significantly predict the endorsement of the absolute statement, $F(1,763) = 3.52, p > .06, \eta_p^2 = .01$, or the endorsement of the relative statement, $F(1,763) = .01, p > .94, \eta_p^2 = .00$. The variable for free lunch also did not possess a significant relationship with aggregate delinquency, $F(1,805) = .38, p > .54, \eta_p^2 = .00$, and aggregate religious commitment, $F(1,805) = .20, p > .66, \eta_p^2 = .00$.

Living situation. Eight different living situation arrangements were presented to participants and collapsed into three main categories. The following were the eight different options presented to participants with the percentage of participants who selected that option in parenthesis: both parents ($N=388, 48.3\%$), single parent ($N=203, 25.5\%$), parent and step-parent ($N=154, 19.2\%$), part time with both ($N=30, 3.7\%$), other relatives ($N=17, 2.1\%$), group home ($N=1, 0.1\%$), foster family ($N=4, 0.5\%$), and one my own / with friends ($N=4, 0.5\%$). The collapsed categories were living with: both parents (48.3%), a single parent (25.5%), and other living arrangements (26.1%).

There were significant mean differences between living arrangements and the endorsement of the absolute statement, overall delinquency, and aggregate religious commitment. Living situation did not have a significant relationship with relative endorsement, F

(2,804) = .23, $p > .80$, $\eta_p^2 = .00$. Despite the overall ANOVA for living situation and absolute endorsement just missing significance, $F(2,804) = 2.81$, $p > .06$, $\eta_p^2 = .01$, there were significant mean differences between living with both parents, $M = .78$ (.02), and living with one parent, $M = .69$ (.03).

The amount of delinquency also varied significantly between different living situations, $F(2,804) = 13.52$, $p < .00$, $\eta_p^2 = .03$. Participants living with both parents had lower rates of delinquency, $M = 4.36$ (.25), and were significantly different from participants living with one parent, $M = 6.33$ (.34), as well as participants in other living situations, $M = 5.92$ (.34).

There were significant mean differences between some living situations and aggregate religious commitment despite the overall ANOVA missing significance, $F(2,804) = 2.65$, $p > .07$, $\eta_p^2 = .01$. Participants living with both parents had significantly higher levels of aggregate religious commitment, $M = 6.77$ (.16), compared with participants living with one parent, $M = 6.17$ (.22). Participants who were living in other parental situations had religious commitment levels that fell in between participants living with one and two parents, $M = 6.38$ (.22).

Time without adult supervision. When participants had more time without adult supervision, the frequency of delinquent activity increased as well. There were 83 participants who reported on average having less than 1 hour of adult supervision per day (10.3%), 189 participants who reported 1-2 hours without adult supervision (23.4%), 201 participants who reported an average of 3-4 hours (24.9%), and 334 participants who reported more than 4 hours a day on average without adult supervision (41.4%). There was no significant relationship between the amount of time without adult supervision and the endorsement of the absolute, $F(3,803) = 1.42$, $p > .24$, $\eta_p^2 = .01$, and relative, $F(3,803) = .76$, $p > .52$, $\eta_p^2 = .00$, statements as well as aggregate religious commitment, $F(3,803) = 1.65$, $p > .18$, $\eta_p^2 = .01$. As time without adult

supervision increased there was a significant increase in the frequency of delinquent activity, $F(3,803) = 10.72, p < .00, \eta_p^2 = .04$. If participants had less than one hour per day without adult supervision then their average frequency of delinquent activity was $M=4.16 (.53)$. If the time without adult supervision was from one to two hours, $M=4.02 (.35)$, then total delinquency was still less than three to four hours without adult supervision, $M=5.17 (.34)$. Participants with more than four hours of no adult supervision had the highest rates of delinquent activity, $M=6.31 (.27)$, that was significantly different from the other amounts of time without adult supervision which is illustrated in Figure 3.2.

The overall relationship between hours per day without adult supervision and parental living situation was found to be significant, $F(2,804) = 14.90, p < .00, \eta_p^2 = .04$. Living with both parents was found to be significantly related to reduced time without adult supervision per day, $M=2.77 (.05)$. The amount of time without adult supervision was significantly different between living with both parents and living with one parent, $M=3.19 (.07)$, or in another living situation, $M=3.13 (.07)$.

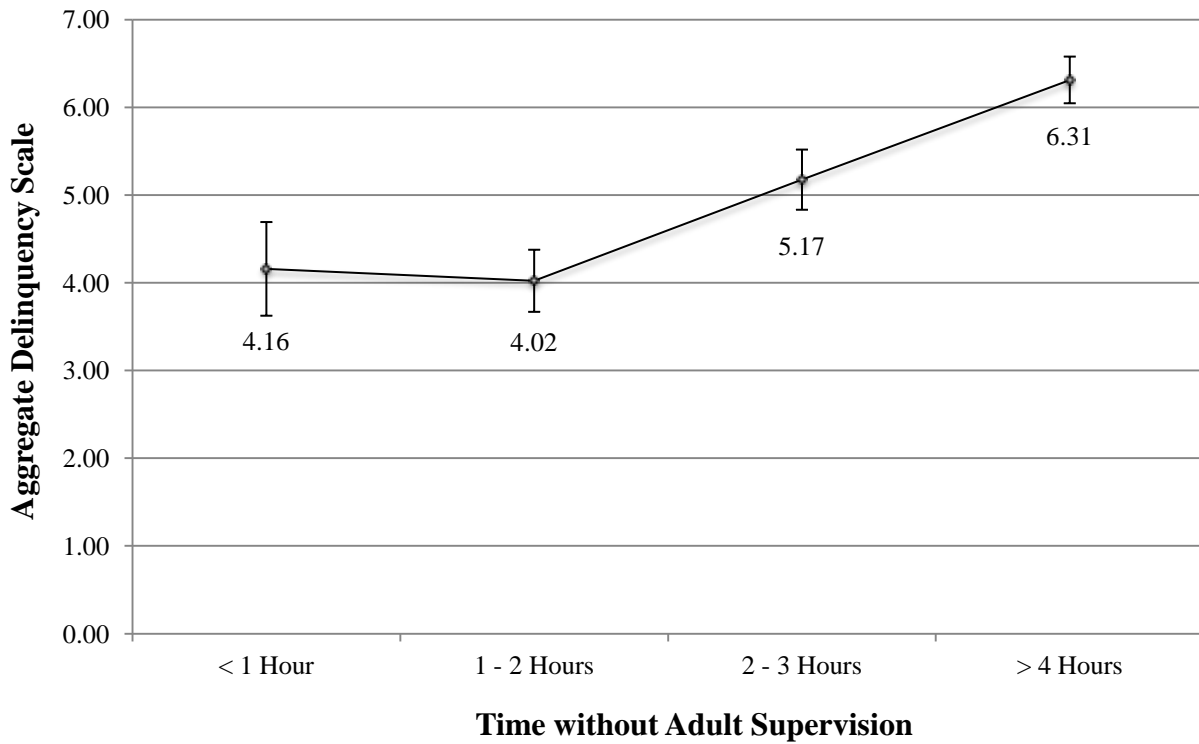
Parental education. An increase in parental education was positively related to an increase in aggregate religious commitment, $F(6,725) = 3.18, p < .00, \eta_p^2 = .03$, and a decrease in delinquent activity, $F(6,725) = 2.94, p < .01, \eta_p^2 = .02$. Parental education was not significantly related to the absolute, $F(6,725) = 1.01, p > .42, \eta_p^2 = .01$, or relative, $F(6,725) = .34, p > .92, \eta_p^2 = .00$, statement endorsement. An illustration of the relationship between average parental education and aggregate religious commitment and aggregate delinquent behavior is visible in Figure 3.2 and 3.3.

Usual grades in school. There were significant differences between usual grades in school when predicting absolute or relative statement endorsement, aggregate delinquency, and

aggregate religious commitment. The number of participants who reported receiving an average of A's in school was 236 (29.2%), B's was 378 (46.8%), C's was 161 (20.0%), D's was 21 (2.6%), and F's was only 11 participants (1.4%). Differences between usual grades in school was significant in predicting the endorsement of the absolute statement, $F(4,802) = 7.84, p < .00, \eta_p^2 = .04$, and the relative statement, $F(4,802) = 3.47, p < .01, \eta_p^2 = .02$. Improvements in school grades were related to decreases in overall delinquent activity, $F(4,802) = 22.98, p < .00, \eta_p^2 = .10$, and increased aggregate religious commitment, $F(4,802) = 4.96, p < .00, \eta_p^2 = .02$. See Figures 3.4 through 3.7 for illustrations of the relationships described with usual grades in school.

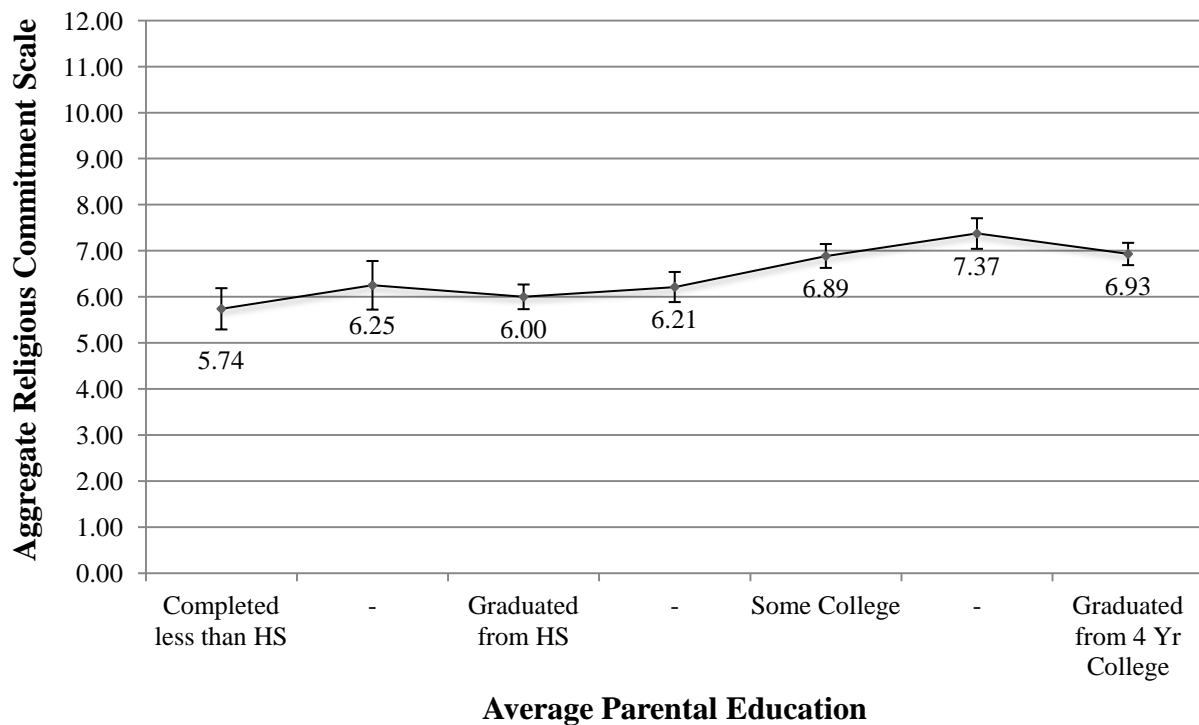
Figure 3.2

Frequency of Aggregate Delinquency and Time without Adult Supervision



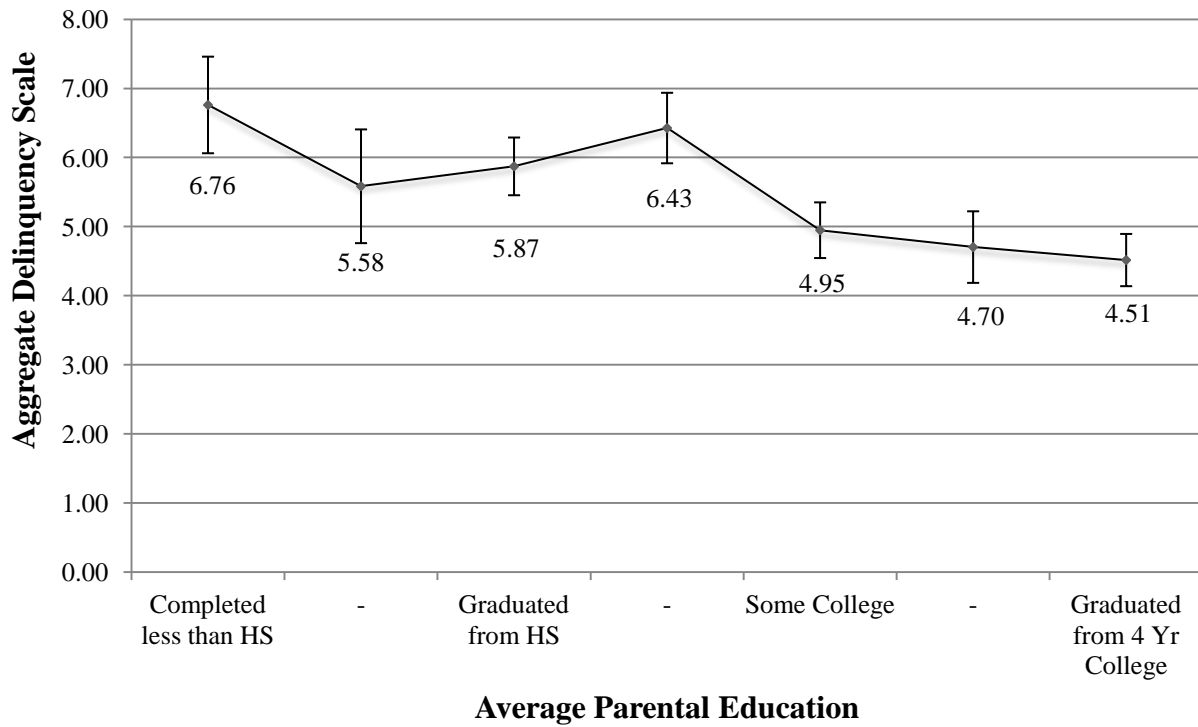
Notes: $F(3,803) = 10.72, p < .00, \eta_p^2 = .04$. The range of the total aggregate delinquency scale was from 0 to 32. Participants who had one to two hours without adult supervision reported significantly lower delinquent behavior than participants with two or more hours without adult supervision.

Figure 3.3
Aggregate Religious Commitment and Average Parental Education



Notes: $F(6,725) = 3.18, p < .00, \eta_p^2 = .03$. Participants with parents who completed some college or more were significantly more committed to their religion than participants with parents who only graduated from high school or completed less than a high school equivalent education.

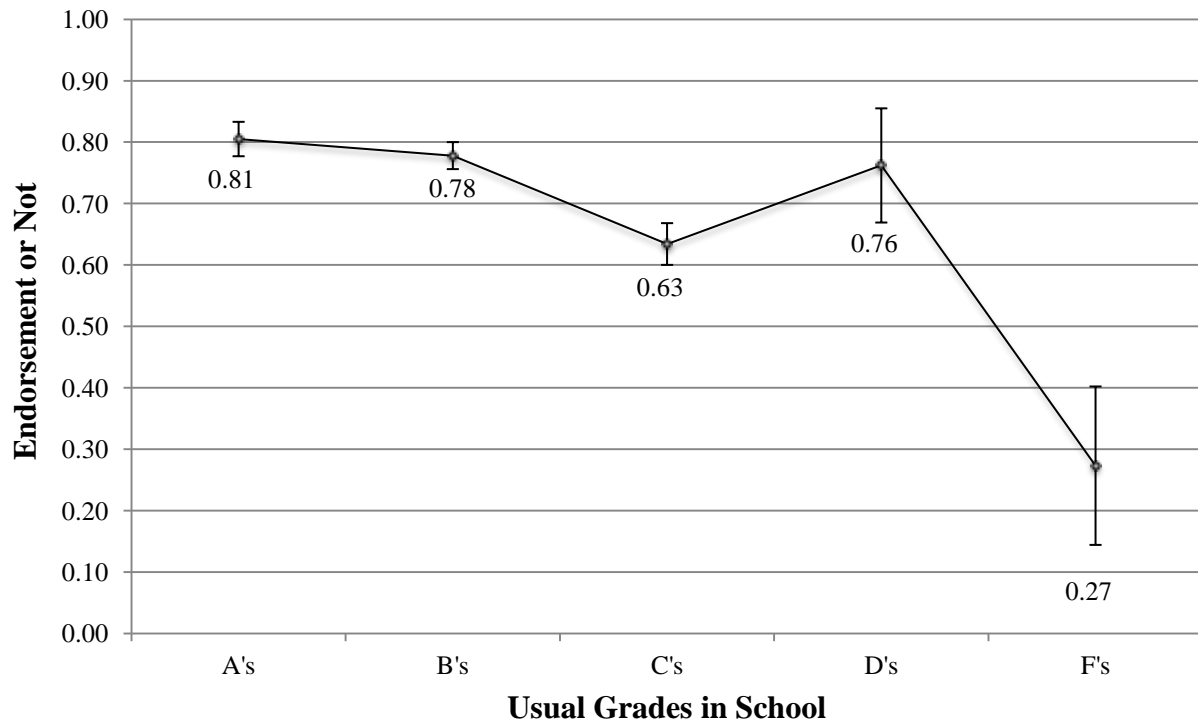
Figure 3.4
Frequency of Aggregate Delinquency and Average Parental Education



Notes: $F(6,725) = 2.94, p < .01, \eta_p^2 = .02$. The range of the total aggregate delinquency scale was from 0 to 32. Frequency of delinquent behavior with parents who graduated from a four-year college was significantly lower when compared to participants with parents who only completed high school or completed less than high school.

Figure 3.5

Absolute Statement Endorsement and Usual Grades in School



Notes: $F(4,802) = 7.84, p < .00, \eta_p^2 = .04$. Endorsement was coded as “1” and non-endorsement was coded as “0”. The number of participants in each grade category:

A's: n=236

B's: n=378

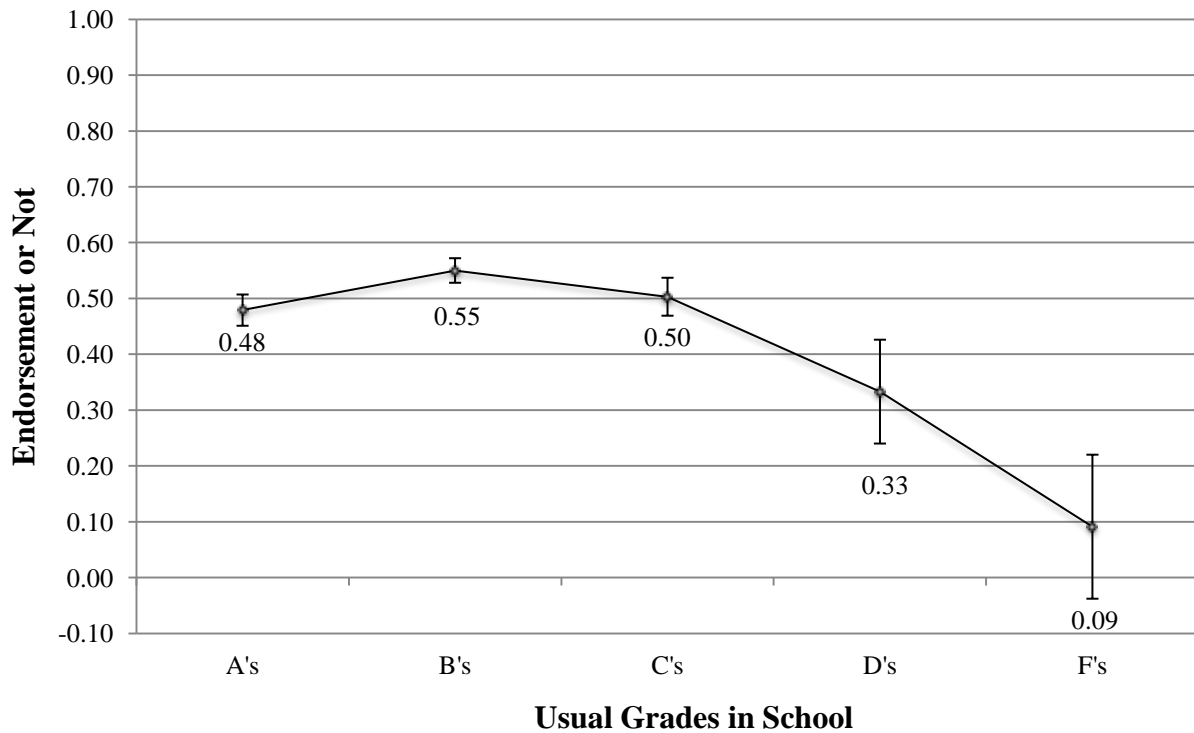
C's: n=21

D's: n=161

F's: n=11

Figure 3.6

Relative Statement Endorsement and Usual Grades in School



Notes: $F(4,802) = 3.47, p < .01, \eta_p^2 = .02$. Endorsement was coded as “1” and non-endorsement was coded as “0”. The number of participants in each grade category:

A's: n=236

B's: n=378

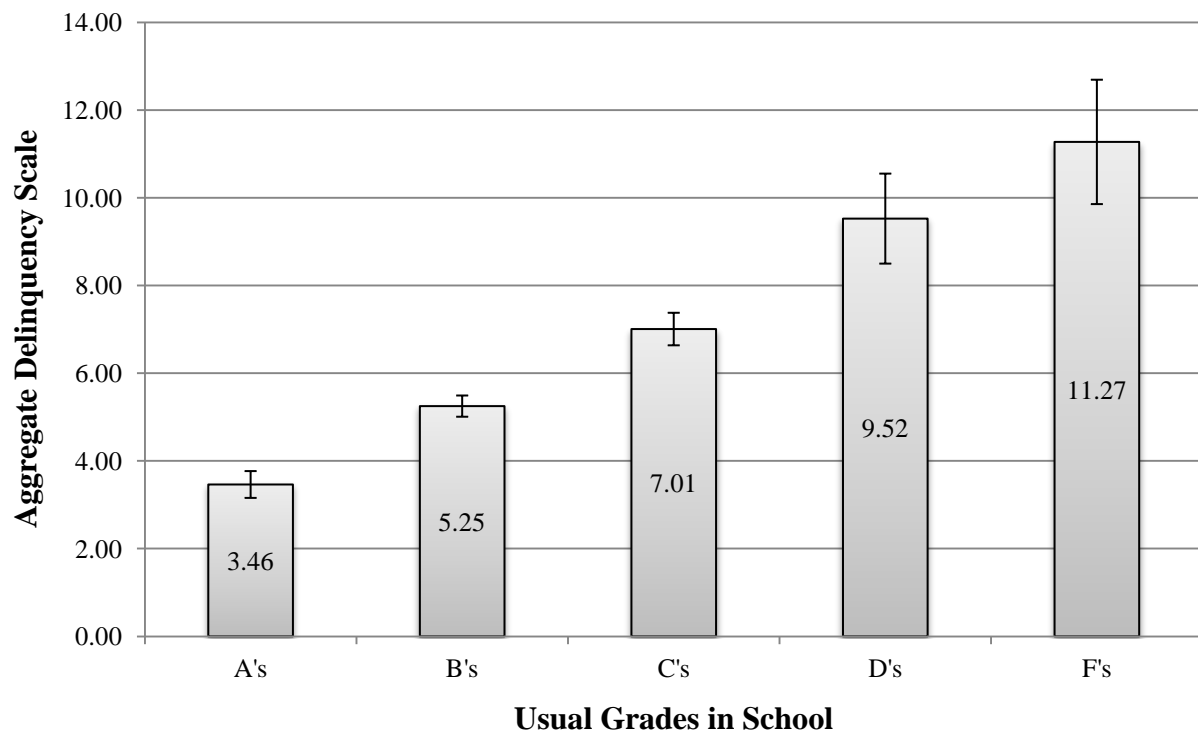
C's: n=21

D's: n=161

F's: n=11

Figure 3.7

Frequency of Aggregate Delinquency and Usual Grades in School



Notes: $F(4,802) = 22.98, p < .00, \eta_p^2 = .10$. The range of the total aggregate delinquency scale was from 0 to 32. The number of participants in each grade category:

A's: $n=236$

B's: $n=378$

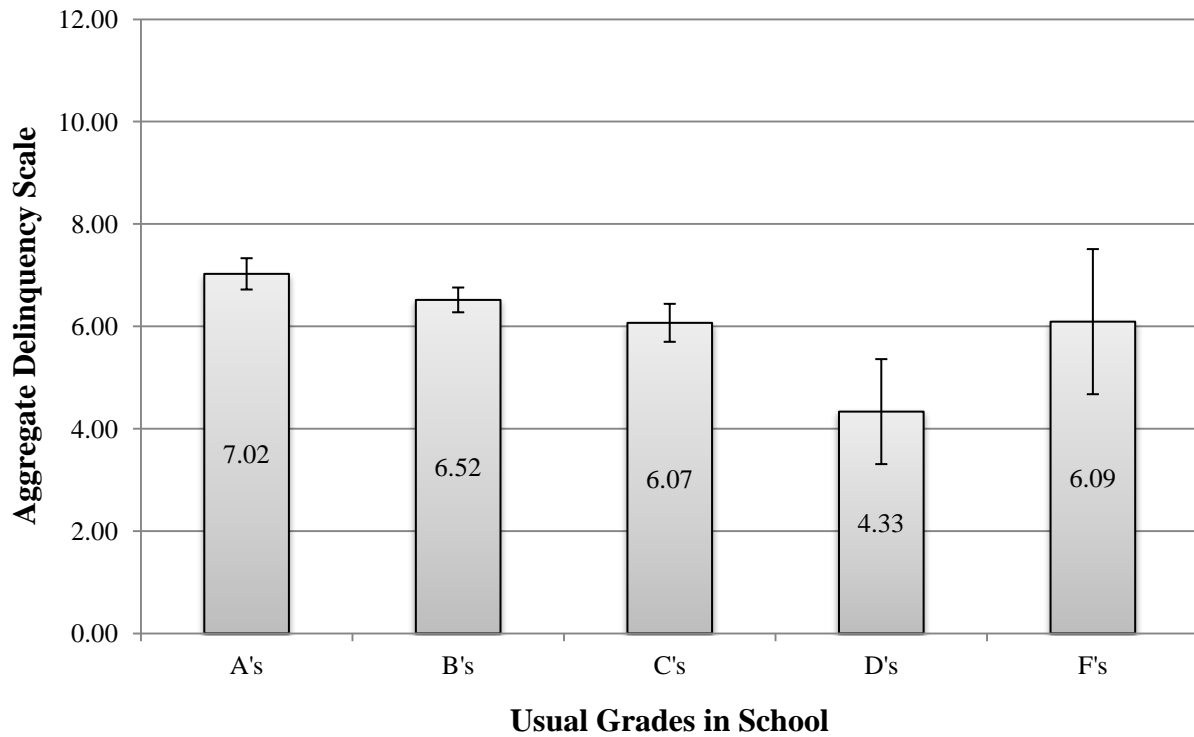
C's: $n=21$

D's: $n=161$

F's: $n=11$

Figure 3.8

Aggregate Religious Commitment and Usual Grades in School



Notes: $F(4,802) = 4.96, p < .00, \eta_p^2 = .02$. The number of participants in each grade category:

A's: $n=236$

B's: $n=378$

C's: $n=21$

D's: $n=161$

F's: $n=11$

Categorical/Ordinal Risk Endorsement

Participants had the option of endorsing two statements that represented their risk assessment. The first phrase, “no risk is better than some risk,” is an example of the categorical/absolute statement of risk while the later, “less risk is better than more risk,” is an example of the ordinal/relative statement of risk which makes more fined grained distinctions between degrees of risk than the categorical/absolute statement. Despite the slight difference, both statements are describing a similar relationship in which possessing a lot of risk is a worse option. Together, endorsement of one, both, or none of the statements has been shown to be related to risk taking behavior (Mills, Reyna, & Estrada, 2008).

A Pearson’s Chi-square test yielded significant differences among the four groups, $X^2 = 50.29, p < .00$. There were 351 (43.5%) participants who endorsed both of the statements while only 143 (17.7%) people endorsed neither statement. The number of participants who endorsed only the absolute statement, $n=254$ (31.5%), was significantly larger than the number of participants who endorsed only the relative statement, $n=59$ (7.3%).

When endorsements of the absolute and relative statements were correlated with the religious measures as well as the frequency of after school activity, a distinct pattern emerges. When observing the endorsement of the absolute statement, the frequency of religious services creates the largest magnitude correlation coefficients, Pearson’s $r(807) = .15, p < .00$; Spearman’s $r(807) = .15, p < .00$, followed closely by the aggregate religious commitment coefficient, Pearson’s $r(807) = .14, p < .00$; Spearman’s $r(807) = .14, p < .00$. The magnitude of the importance of religion coefficient and the endorsement of the absolute statement was Pearson’s $r(807) = .10, p < .01$; Spearman’s $r(807) = .11, p < .00$. The correlation coefficient for the frequency of religious activities was Pearson’s $r(807) = .09, p < .03$; Spearman’s $r(807) =$

.09, $p < .01$, which was then closely followed by the frequency of after school activities, Pearson's $r(807) = .09, p < .01$; Spearman's $r(807) = .08, p < .03$. A pattern emerges that may suggest a relationship with religious teaching and an enhanced absolute or gist-based outlook. When the absolute statement was correlated with the aggregate delinquency scale, there was a significant relationship with the sexual behavior item included, Pearson's $r(807) = -.10, p < .00$; Spearman's $r(807) = -.09, p < .01$, as well as when it was excluded, Pearson's $r(807) = -.09, p < .01$; Spearman's $r(807) = -.08, p < .03$. As a result, when endorsement of the absolute statement increased, aggregate delinquency decreased.

For the endorsement of the relative statement, only the bivariate correlation for the importance of religion was significant at Pearson's $r(807) = -.08, p < .02$; Spearman's $r(807) = -.08, p < .03$. Correlations for aggregate religious commitment, frequency of religious services, religious activities, and after school activities were all non-significant. Also, unlike the correlations between the absolute statement and aggregate delinquency, increased endorsement of the relative statement was positively related to increased delinquent behavior, Pearson's $r(807) = .06, p < .10$; Spearman's $r(807) = .09, p < .02$, except when the sexual behavior item was excluded from the aggregate delinquency measure, Pearson's $r(807) = .04, p > .32$; Spearman's $r(807) = .07, p > .07$.

Logistic regression analyses were performed with aggregate religious commitment predicting absolute or relative endorsement. Increased aggregate religious commitment was significantly related to an increase in absolute statement endorsement, $B=.10, SE B=.03, p<.00$. Increased aggregate religious commitment was not significantly related to a decrease in relative statement endorsement, $B=-.03, SE B=.02, p>.25$.

Finally, univariate analysis of variance (ANOVA) models were constructed which help to explain significant mean differences of delinquency and aggregate religious commitment depending upon the endorsement of the absolute statement. In terms of delinquency, endorsing the relative statement was non-significant, $F(1,805) = 2.28, p > .13, \eta_p^2 = .00$, while endorsing the absolute statement was significant, $F(1,805) = 9.45, p < .00, \eta_p^2 = .01$. When participants endorsed the absolute statement, they had an average of $M=4.96 (.20)$ while not endorsing the statement was related to an increase of delinquency $M=6.19 (.35)$. When aggregate religious commitment was included as the dependent variable in the univariate ANOVA, the relative statement was non-significant, $F(1,805) = 1.30, p > .25, \eta_p^2 = .00$, while the endorsement of the absolute statement was a significant variable, $F(1,805) = 15.37, p < .00, \eta_p^2 = .02$. When participants endorsed the absolute statement, they were significantly more religiously committed, $M=6.76 (.13)$, than participants who did not endorse the absolute statement, $M=5.76 (.22)$.

When a Univariate ANOVA was conducted looking at participants who endorsed neither absolute nor relative statement, both statements, or only one of the statements an important trend was uncovered. When aggregate delinquency is used as a dependent variable, participants who only endorsed the absolute statement had a significantly lower aggregate religious commitment score than the rest of the (Table F.120). When aggregate religious commitment was used as a dependent variable, participants who endorsed both the absolute and relative statements as well as only endorsing the absolute statement were significantly more religious than the rest of the participants (Table F.172). Participants who endorsed only the absolute statement had the largest magnitude score on the aggregate religious commitment scale.

There was a significant influence of the absolute and relative statements on aggregate religious commitment as well as the frequency of aggregate delinquency. Endorsing the absolute

statement was a protective factor against delinquency. Through the simple statements that fuzzy-trace theory predicts, a general trend was able to be developed with the absolute risk assessment being more of a protective factor than the endorsement of the relative risk assessment statement.

Categorical/Ordinal Endorsement on Fundamentalism

The five consolidated denominations were analyzed in a univariate ANOVA with the absolute and relative statement as dependent variables. The absolute statement ANOVA was significant, $F(4,800) = 2.36, p > .05, \eta_p^2 = .01$, indicating differences among denominations. There were significant differences between most of the religious denominations and the non-religious group. The Protestant group, $M=.79 (.03)$, the Catholic group, $M=.77 (.03)$, and the Other religious affiliation group, $M=.77(.04)$, were significantly different from the non-religious group, $M=.65 (.04)$. However, the Born-again Christian group did not significantly endorse the absolute statement any differently than the other groups, $M=.74 (.04)$. This finding with Born-again Christians may be explained by the classification of Born-again Christian denoting multiple denominations instead of just one as indicated in this dataset. The ANOVA with the relative statement endorsement was not significant, $F(4,800) = .64, p > .64, \eta_p^2 = .00$.

A Chi-square test was also performed on these five groups in order to help determine if there were significant differences between endorsements of the absolute statement. When all five consolidated denominations were analyzed, the Chi-square statistic just missed significance, $\chi^2 = 9.37, p > .05$. Endorsement of the absolute statement by denomination was shown to be 79% of Protestants, 77.2% of Catholics, 76.6% of other denominations and religions, 73.5% of Born-again Christians, and 65.1% of non-religious. The Chi-square test for the endorsement of the relative statement was also non-significant, $\chi^2 = 2.56, p < .63$.

When groups were further combined into religious and non-religious categories, a significant difference emerges for the endorsement of the risk assessment statements. When analyzed in a univariate ANOVA, endorsement of the absolute statement was significant between groups, $F(1,803) = 7.96, p < .01, \eta_p^2 = .01$. The religious group endorsed the statement more often, $M = .77 (.02)$, compared to the non-religious group, $M = .65 (.04)$. Endorsement of the relative statement was not significantly different between groups, $F(1,803) = .15, p > .70, \eta_p^2 = .00$. When a Chi-squared test was used, there was still a significant difference between group endorsements of the absolute statement, $X^2 = 7.90, p < .01$. A large majority of the religious group, 76.9%, endorsed the absolute statement while only 65.1% of the non-religious group did so. The Chi-squared test for the endorsement of the relative statement was again, non-significant, $X^2 = .15, p > .70$.

These results confirmed a considerable difference in the endorsement of the absolute statement between participants claiming religious affiliation and those that are not. Further analyses needed to be conducted to investigate if endorsement of the absolute and relative statements were significantly contributing to lower frequencies of delinquent behavior. Other variables might have been contributing to the decline as well.

Categorical/Ordinal Endorsement on Religious Commitment and Delinquency

Mediation. In order to explore the relationship between aggregate religious commitment and aggregate delinquency, mediation analysis was employed to help identify possible alternative relationships by the absolute or relative endorsement variables. Since endorsement of the absolute or relative statement was a binary variable, logistic regression was used to explore the relationship between the independent variable, aggregate religious commitment, and the absolute or relative statement. Linear regressions were then used to explore the relationship

between the absolute or relative statement and the aggregate delinquency scale as well as the overall relationship between aggregate religious commitment and the aggregate delinquency scale. Equations were used from MacKinnon and Dwyer (1993) as a correction for the dichotomous mediator in the analysis and were then plugged into an online calculator provided by Preacher and Leonardelli (2001) to get the Sobel test statistics as well as the p-values (as cited in Herr, October 2, 2006). See Appendix H for mediation figures.

When the absolute statement was tested as a mediating variable in the relationship between aggregate religious commitment and aggregate delinquency as well as the various individual delinquency items, several mediating relationships emerged as significant. When the aggregate delinquency scale was a dependent variable, endorsement of the absolute statement was a significant mediating variable, Sobel Statistic= -2.01, $p < .04$. Endorsement of the absolute statement was a significant mediator in the relationship between aggregate religious commitment and how often a participant skipped school, Sobel Statistic= -2.21, $p < .03$. The endorsement of the absolute statement was also a significant mediator in the relationship between aggregate religious commitment and sexual behavior, Sobel Statistic = -2.25, $p < .02$. However, upon removal of participants who were over the age of legal consent in their state (17 years-old in Texas and New York), the relationship misses significance, Sobel Statistic = -1.94, $p > .05$. None of the other individual delinquency items were significantly mediated by the endorsement of the absolute statement. Even though there were significant bivariate correlations between aggregate religious commitment and most of the individual delinquency items, the frequency of property damage/graffiti was the only delinquency item not included in this analysis because of a non-significant relationship with aggregate religious commitment.

The endorsement of the relative statement did not produce significant bivariate correlations with any of the individual or aggregate delinquency items, except for sexual behavior. As a result mediation analyses were only conducted with the relative endorsement item as a mediating variable with aggregate delinquency and the individual sexual behavior item with and without the seventeen year-olds from Texas and New York. Relative endorsement did not prove to be a significant mediator in any of these relationships.

To ensure proper statistical calculation and normalization of scales was used as per Herr (October 2, 2006), linear regressions were also used in conjunction with the online Sobel Statistic calculator (Preacher & Leonardelli, 2001) to compare against the previous analyses. This step did match the previous analyses that were run with both logistic and linear regressions. The absolute statement was still a significant mediating variable between aggregate religious commitment and skipping school, Sobel Statistic = -2.19, $p < .03$ as well as between aggregate religious commitment and sexual behavior, Sobel Statistic = -2.24, $p < .03$. While aggregate delinquency and sexual behavior without the seventeen year-olds from Texas and New York just missed significance, Sobel Statistic = -2.00, $p > .05$ and Sobel Statistic = -1.96, $p > .05$ respectively. The possible mediation by the relative statement was still non-significant for all of the aggregate and individual delinquency items when using only linear regressions.

Religious importance was substituted for aggregate religious commitment due to the significant bivariate correlations that were present in previous analyses. Only the absolute endorsement statement was tested as a possible mediating variable between the importance of religion to the participant and the aggregate delinquency scale. All mediation analyses for the aggregate and individual delinquency items were non-significant, including how often

participants skipped school which just barely missed significance, Sobel Statistic = -1.96, $p > .05$ and sexual behavior for all participants, Sobel Statistic = -2.00, $p > .05$.

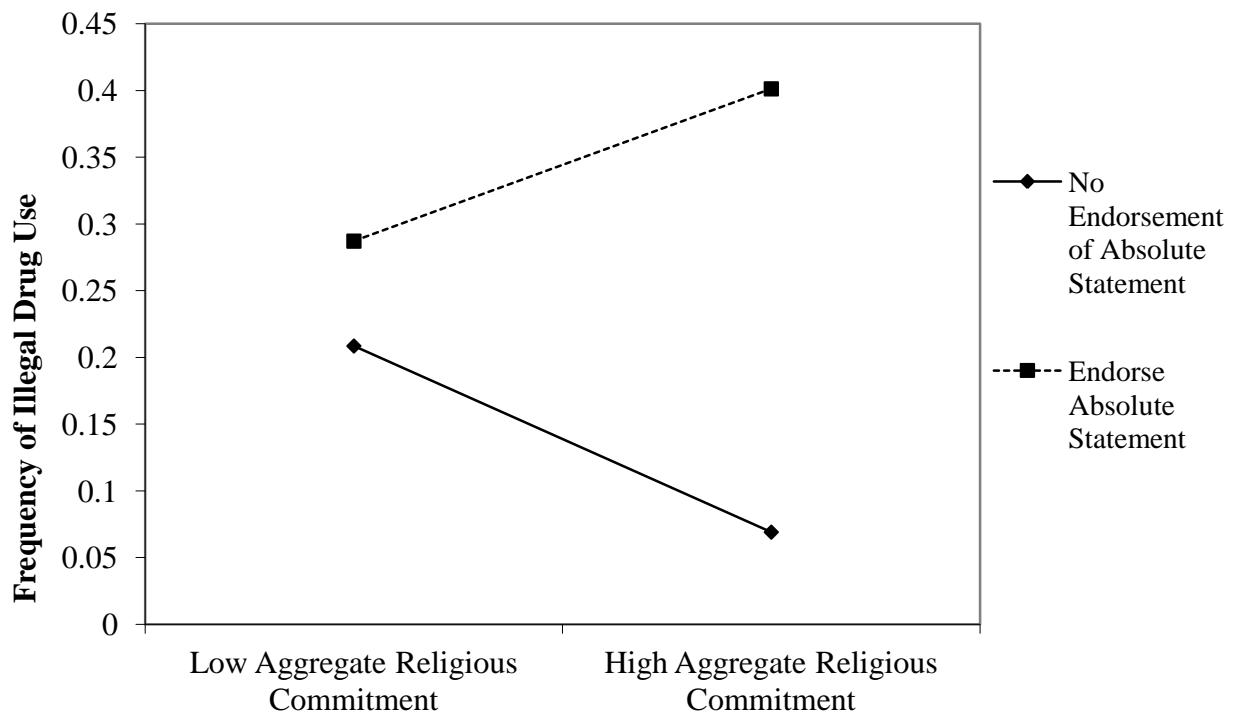
Analyses were performed on the relationship between after school activity and aggregate delinquent activity. Possible mediation by endorsement of the absolute and relative statements was tested and disconfirmed. The endorsement of the absolute statement, Sobel Statistic = -1.85, $p > .06$, and the endorsement of the relative statement, Sobel Statistic = 1.17, $p > .24$, did not significantly mediate the relationship between after school activity and aggregate delinquency.

As a result, endorsement of the absolute risk statement was a significant mediating factor in the relationship between religious commitment and aggregate delinquency. It was also a significant mediating factor between religious commitment and the frequency of skipping school. Endorsing the absolute statement was not a significant mediating factor for any relationship when religious importance or after school activity was substituted for religious commitment as an independent variable.

Moderation. In moderation analyses, there is a third variable that affects the strength or direction of the relationship between the independent and dependent variables. The endorsements of the absolute and relative statements were analyzed to determine if these items moderated any significant relationships between aggregate religious commitment or religious importance and aggregate delinquency. Only one relationship with aggregate religious commitment predicting the frequency of drug use was found to have been significantly moderated by the endorsement of the absolute statement as illustrated in Figure 3.9.

Figure 3.9

Moderation by the Endorsement of the Absolute Statement on the Relationship between Aggregate Religious Commitment and Frequency of Illegal Drug Use



Notes: $F(7,799) = 2.82, p < .01; (R^2 = .02)$.

Aggregate Religious Commitment*Absolute Endorsement: $B = .04, SE B = .02, \beta = .08, p < .04$.

Frequency of Illegal Drug Use ranges from 0 to 4, $M = .14 (.53)$.

Aggregate religious commitment. Four interaction terms were created in addition to the main variables of aggregate religious commitment, absolute statement endorsement, and relative statement endorsement. The four interaction terms were absolute by relative, absolute by religious commitment, relative by religious commitment, and absolute by relative by religious commitment. Together these variables were analyzed in a linear regression to test for significance with the aggregate and individual items from the delinquency scale. Only one significant interaction was found between aggregate religious commitment and the endorsement of the absolute statement for the use of illegal drugs. All of the other individual delinquency items were not significantly moderated by the endorsement of the absolute or relative statements.

When predicting aggregate delinquency, there were no significant moderations to be found, $F(7,799) = 6.45, p < .00; (R^2=.05)$. However, endorsement of the absolute statement was significantly related to decreased delinquency, $B=-1.06, SE B=.45, \beta=-.09, p<.02$, while endorsement of the relative statement was significantly related with increased delinquent behavior, $B=.72, SE B=.36, \beta=.07, p>.05$. Aggregate religious commitment was found to be a very significant predictor of decreased delinquency as well, $B=-.29, SE B=.06, \beta=-.18, p<.00$.

The relationship between aggregate religious commitment and drug use was analyzed to determine moderation effects, a significant moderation effect of endorsing the absolute statement was found. The main effect of aggregate religious commitment, $B=-.02, SE B=.01, \beta=-.13, p<.00$, and the overall relationship, $F(7,799) = 2.82, p < .01; (R^2=.02)$, were found as well. The interaction between aggregate religious commitment and the endorsement of the absolute statement, $B=.04, SE B=.02, \beta=.08, p<.04$, suggested that the endorsement of the absolute risk statement significantly affected the magnitude of drug use, which decreased for more religiously

committed participants. The main effects of the absolute or relative statement endorsement were non-significant.

When the underage sexual behavior item was removed from the aggregate delinquency scale and analyzed in the same fashion as the above analysis, the significant relationship that occurred between the absolute statement endorsement and the relative statement endorsement disappeared, $B = -.62$, $SE B = .36$, $\beta = -.07$, $p > .09$ and $B = .39$, $SE B = .29$, $\beta = .05$, $p > .18$ respectively. The overall regression was still significant, $F(7,799) = 5.83$, $p < .00$; ($R^2 = .05$), as was the moderate negative relationship between aggregate religious commitment and the aggregate delinquency scale, $B = -.24$, $SE B = .05$, $\beta = -.19$, $p < .00$. The non-significant findings produced by the absolute and relative statement endorsements exemplified the fact that there was a significant relationship between underage sexual behavior and risk taking. While religious commitment doesn't necessarily produce a large magnitude relationship with delinquency, it was still very significant even with the removal of one delinquency item.

When the individual delinquency item of sexual behavior was analyzed, the overall regression and the main effects were significant, $F(7,799) = 4.18$, $p < .00$; ($R^2 = .03$), but not the interaction terms. Endorsement of the absolute statement significantly predicted a decrease in sexual behavior, $B = -.44$, $SE B = .14$, $\beta = -.11$, $p < .00$, while endorsement of the relative statement was negatively related with sexual behavior, $B = .33$, $SE B = .11$, $\beta = .11$, $p < .00$. Participants who selected the relative statement were also more likely to participate in and become more intimate with their sexual behavior than those participants who did not endorse the relative statement. Similar to other individual delinquency items, increased religious commitment by participants was negatively related to sexual behavior, $B = -.05$, $SE B = .02$, $\beta = -.10$, $p < .01$.

In order to create a more accurate model of underage sexual activity, adolescent participants who were over the age of seventeen at the time of the survey from the states of Texas and New York were excluded from the analysis based on the legal age of consent in those states. Again, by excluding these participants a more realistic understanding of delinquent behavior could be observed. This model was a significant predictor of underage sexual behavior, $F(7,799) = 3.02, p < .00; (R^2=.03)$. By endorsing the absolute statement or by being more committed to their religion, participants were still less likely to engage in underage sexual behavior, $B=-.40, SE B=.15, \beta=-.11, p<.01$ and $B=-.04, SE B=.02, \beta=-.09, p<.02$ respectively. Participants were still more likely to engage in underage sexual behavior if they endorsed the relative statement, $B=.31, SE B=.12, \beta=.10, p<.01$. By excluding participants who were over the legal age of consent in their states and finding similar results provides additional evidence for the relationship between the absolute and relative risk assessment statements as well as the importance of religious commitment. While there were no significant moderation effects present, these results highlight a considerable relationship between aggregate religious commitment, absolute and relative risk assessment items, and underage sexual behavior.

Religious importance. When analyzing the relationship between religious importance and the same aggregate and individual delinquency items, no significant moderation items emerge. However, due to the larger magnitude of the bivariate correlations between aggregate delinquency and religious importance than the religious commitment scale, this set of analyses provided a comparison to the results when the aggregate religious commitment scale was used. Linear regressions included variables for the endorsement of the absolute statement, the relative statement, the importance of religion, and the interaction terms of absolute endorsement by

relative endorsement, absolute endorsement by religious importance, relative endorsement by religious importance, and absolute endorsement by relative endorsement by religious importance.

When aggregate delinquency was analyzed as a dependent variable in this type of linear regression, $F(7,799) = 10.34, p < .00; (R^2=.08)$, only the main effects of absolute statement endorsement and religious importance were significant. Similar trends to previous analyses were found. As endorsement of the absolute statement increased the frequency of delinquent activity decreased, $B=-1.04, SE B=.44, \beta=-.09, p<.02$. As religious importance increased the frequency of delinquent activity decreased as well, $B=-.96, SE B=.13, \beta=-.26, p<.00$. This same analysis was also conducted without the individual sexual behavior item and produced similar results to when the aggregate religious commitment was included. The overall reaction, $F(7,799) = 10.45, p < .00; (R^2=.08)$, only produced the main effect of religious importance, $B=-.84, SE B=.11, \beta=-.27, p<.00$. The significant endorsement of the absolute statement was again, no longer present when the sexual behavior item was removed from the aggregate delinquency scale.

When we analyzed the individual delinquency items, we began to see a similar pattern arise with religious importance as we did with the aggregate religious commitment item. There were no significant interactions with the individual delinquency items when religious importance was used in place of aggregate religious commitment.

When sexual behavior was included in the linear regression analysis, we found that both absolute and relative risk assessment statements were significant as well as how important religion was to a participant, $F(7,799) = 4.75, p < .00; (R^2=.04)$. As endorsement of the absolute statement increased there was a decrease in the frequency of risky sexual behavior, $B=-.47, SE B=.14, \beta=-.13, p<.01$. The opposite was true when participants endorsed the relative statement as this was associated with increased frequency of risky sexual behavior, $B=.32, SE B=.11, \beta=.10,$

$p < .01$. Placing more importance on religion was also associated with less sexual behavior, $B = -.13$, $SE B = .04$, $\beta = -.11$, $p < .00$. When adolescents from Texas and New York who are older than seventeen years were removed, a similar trend was still found. Placing more importance on religion or endorsement of the absolute statement was associated with decreased underage sexual behavior, $B = -.14$, $SE B = .05$, $\beta = -.12$, $p < .00$ and $B = -.41$, $SE B = .15$, $\beta = -.12$, $p < .01$ respectively. On the other hand, endorsement of the relative statement was once again associated with an increased frequency and intimacy of underage sexual behavior, $B = .30$, $SE B = .12$, $\beta = .10$, $p < .01$.

As a result of these moderation analyses, aggregate religious commitment and religious importance emerged as relatively consistent protective factors against aggregate and individual delinquent behaviors. While endorsements of the risk assessment items were not always significant moderators (and null effects are not informative), endorsement of the absolute statement and endorsement of the relative statement proved to be significant protective and risk factors for adolescents respectively.

Regressions. In order to evaluate if the categorical and ordinal risk assessment statements were contributing unique variance to delinquent behavior, they were included in several regressions. Initial regressions tested to see if there was a significant unique variance being contributed by the endorsement of either the absolute or relative statements above and beyond what religious commitment was contributing. Even when other potential explanatory factors were included in the analyses, endorsement of the absolute statement still possessed significant unique variance in its relationship with aggregate delinquency. An attempt was made to minimize the multicollinearity between variables.

Categorical/Ordinal and religious commitment. There was a significant negative relationship between endorsement of the absolute statement and aggregate delinquency.

Decreases in aggregate delinquency were also related to increases in aggregate religious commitment and increases in the importance of religion for participants.

Endorsement of the absolute statement, the relative statement and the aggregate religious commitment scale were included as predictor variables in a simultaneous linear regression with aggregate delinquency as the dependent variable. Together, endorsement of the absolute statement and the aggregate religious commitment scale significantly predicted variance in aggregate delinquency, $F(3,803) = 14.73, p < .00; (R^2=.05)$. Increases in aggregate religious commitment were associated with decreases in aggregate delinquency, $B=-.29, SE B=.05, \beta=-.19, p<.00$. Also, endorsement of the absolute risk statement was related with decreases in aggregate delinquent behavior, $B=-1.14, SE B=.41, \beta=-.10, p<.01$. This pattern of significance was still found when the sexual behavior item was removed from the aggregate delinquency variable, $F(3,803) = 13.03, p < .00; (R^2=.05)$. Increases in the aggregate religious commitment were related to decreases in aggregate delinquent behavior, $B=-.24, SE B=.04, \beta=-.19, p<.00$. Endorsement of the absolute statement, $B=-.70, SE B=.34, \beta=-.08, p<.04$, was also related to decreases in aggregate delinquency.

Substituting religious importance for aggregate religious commitment in the linear regression produced similar significant results to the previous regression with aggregate religious commitment, $F(3,803) = 23.95, p < .00; (R^2=.08)$. Increased religious importance was associated with decreased aggregate delinquency, $B=-.96, SE B=.13, \beta=-.26, p<.00$ as was endorsement of the absolute statement, $B=-1.11, SE B=.40, \beta=-.10, p<.01$. When the sexual behavior item was removed from the aggregate delinquency scale, $F(3,803) = 24.30, p < .00; (R^2=.08)$, endorsement of the absolute statement and increased religious commitment were still significant predictors. Again, endorsement of the absolute principle and greater importance of religion in

participants' lives were associated with decreases in aggregate delinquency, $B=-.66$, $SE B=.33$, $\beta=-.07$, $p>.05$ and $B=-.83$, $SE B=.10$, $\beta=-.27$, $p<.00$ respectively.

Other predictors of delinquency added. Even upon the addition of other potential explanatory variables, endorsements of the absolute statement as well as increased religious commitment were significantly related to decreases in delinquency. This was a consistent finding throughout these simultaneous linear regressions.

The age of participants as well as their gender was added into the linear regressions with the absolute and relative risk statement endorsements as well as aggregate religious commitment, $F(5,801) = 11.18$, $p < .00$; ($R^2=.07$). The age of participants emerged as a significant predictor of aggregate delinquency. As age increased, so too did the frequency of delinquent behavior $B=.57$, $SE B=.18$, $\beta=.11$, $p<.00$. Gender was not significant throughout these following regressions.

Time without adult supervision was then included in the linear regression in addition to the aforementioned variables, $F(6,800) = 14.16$, $p < .00$; ($R^2=.10$). The more time each day that participants spent without parental supervision was related to increases in delinquent behavior, $B=.85$, $SE B=.16$, $\beta=.18$, $p<.00$. This was a consistent finding even when variables for Hispanic and African-American were added to the regression, $F(8,798) = 10.89$, $p < .00$; ($R^2=.10$). These factors were not significant.

Table 3.1

Regression: Measures to Predict Aggregate Delinquency (With Sexual Behavior)

Individual Behavior	<i>B</i>	SE	β	<i>t</i>
Basic Regression Variables				
Absolute Statement Endorsement	-1.142	0.410	-0.100	-2.783**
Relative Statement Endorsement	0.700	0.352	0.071	1.986*
Religious Commitment	-0.290	0.054	-0.186	-5.343***
Added (Gender and Age)				
Absolute Statement Endorsement	-1.170	0.408	-0.102	-2.866**
Relative Statement Endorsement	0.703	0.351	0.071	2.002*
Religious Commitment	-0.291	0.054	-0.186	-5.361***
Age	0.573	0.176	0.111	3.253**
Gender	0.220	0.347	0.022	0.634
Added (Time without Adult Supervision)				
Absolute Statement Endorsement	-1.159	0.402	-0.101	-2.885**
Relative Statement Endorsement	0.700	0.346	0.071	2.025*
Religious Commitment	-0.293	0.053	-0.188	-5.485***
Age	0.466	0.175	0.090	2.667**
Gender	0.281	0.342	0.028	0.821
Time without Adult Supervision	0.851	0.163	0.177	5.221***
Added (Ethnicities)				
Absolute Statement Endorsement	-1.165	0.402	-0.102	-2.900**
Relative Statement Endorsement	0.706	0.346	0.071	2.042*
Religious Commitment	-0.282	0.054	-0.180	-5.174***
Age	0.463	0.175	0.090	2.649**
Gender	0.300	0.343	0.030	0.875
Time without Adult Supervision	0.877	0.164	0.182	5.347***
Ethnicity – Hispanic	0.370	0.475	0.027	0.779
Ethnicity – African-American	-0.391	0.395	-0.035	-0.988

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3.2

Regression: Measures to Predict Aggregate Delinquency (Without Sexual Behavior)

Individual Behavior	<i>B</i>	SE	β	<i>t</i>
Basic Regression Variables				
Absolute Statement Endorsement	-0.699	0.335	-0.075	-2.088*
Relative Statement Endorsement	0.375	0.287	0.047	1.303
Religious Commitment	-0.240	0.044	-0.189	-5.419***
Added (Gender and Age)				
Absolute Statement Endorsement	-0.715	0.335	-0.077	-2.136*
Relative Statement Endorsement	0.381	0.288	0.047	1.324
Religious Commitment	-0.242	0.045	-0.190	-5.431***
Age	0.251	0.144	0.060	1.741
Gender	0.173	0.285	0.021	0.609
Added (Time without Adult Supervision)				
Absolute Statement Endorsement	-0.707	0.331	-0.076	-2.138*
Relative Statement Endorsement	0.379	0.285	0.047	1.330
Religious Commitment	-0.243	0.044	-0.191	-5.524***
Age	0.177	0.144	0.042	1.232
Gender	0.215	0.282	0.026	0.763
Time without Adult Supervision	0.587	0.134	0.150	4.375***
Added (Ethnicities)				
Absolute Statement Endorsement	-0.724	0.329	-0.078	-2.199*
Relative Statement Endorsement	0.385	0.283	0.048	1.359
Religious Commitment	-0.220	0.045	-0.173	-4.928***
Age	0.170	0.143	0.040	1.184
Gender	0.259	0.281	0.032	0.923
Time without Adult Supervision	0.634	0.134	0.162	4.720***
Ethnicity – Hispanic	0.436	0.390	0.039	1.118
Ethnicity – African-American	-0.826	0.324	-0.092	-2.550*

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$.

Social Desirability and Index of Peer Relations

The Social Desirability Scale (SDS) was included to ensure honest responses to the delinquency behaviors while the Index of Peer Relations (IPR) tested for possible peer relation influences on the frequency of delinquent behavior. The IPR offered an alternative explanation for some anti-social or delinquent behavior as it may also be called. As expected, IPR was positively related with religious items and after school activity but was negatively related to anti-social delinquent behavior.

Initial bivariate correlations were conducted with the SDS as well as the IPR in regards to aggregate religious commitment, the individual religious measures, and after school activity. As socially desirable behavior increased, the frequency of less desirable (delinquent) behavior decreased. However, SDS was not significantly related to any of the religious measures.

Correlations with IPR and most of the religious items were significant and in the positive direction. Increases in peer relations were associated with increases in aggregate religious commitment, Pearson's $r(807) = .17, p < .00$, importance of religion, Pearson's $r(807) = .15, p < .00$, the frequency of religious service attendance, Pearson's $r(807) = .16, p < .00$, and the rate of religious activity, Pearson's $r(807) = .12, p < .26$. The IPR was also significant with the frequency of after school activity participation, Pearson's $r(807) = .18, p < .00$. Bivariate correlations with the IPR were also conducted with the aggregate and individual delinquency items which revealed no significant correlations.

CHAPTER 4

Discussion

Religious Commitment

Religiosity, used here to refer to religious commitment, was related to the individual items that composed the collective scale. The significance of internalizing beliefs and attitudes and then having them translated into action was observed when the magnitude of bivariate correlations differed with respect to aggregate delinquency. The importance of religion and aggregate religious commitment had the largest magnitude correlation with aggregate delinquency while the frequency of attending religious services had the smallest correlation. Attending religious activities was not significantly correlated with the aggregate delinquency scale. There seemed to be a difference between physically attending something and actually placing more value in the things being said. This may have been due to the fact that people could have easily attended a religiously sponsored picnic, for example, but may have found it much more challenging to believe and actually place a greater importance upon religious doctrine in their lives.

According to Rotter (1996), people make generalizations or decisions differently when they perceive outcomes as either independent or dependent of one's own behavior. Similar to Rotter's concepts of internal and external control, people may have committed different amounts of delinquent activities based on the degree to which they have internalized the morals, values, and teachings of their affiliated religion. Parsing out internal and external control is difficult when attempting to explain religion because of the dual external and internal control that devotees espouse.

The majority of the world's religions, such as Christianity, Judaism, and Islam, believe that there is a higher power at work here on the earth. When religious commitment and importance increase in a person's life, often times it may also mean turning over the reins, so to speak, to a higher authority. So while there is increased value in the religion, internal importance does not necessarily equate with internal control. The motivations related to knowing and understanding the laws and specific doctrines set forth by a particular religion may be very different from committing one's life to follow said doctrine. What is known in the head may not necessarily follow with what is in the heart.

Utilizing the five consolidated religious affiliations (Born-Again Christian, Protestant, Catholic, other religion, no religion) a better understanding of how denominational groups might differ in their risk assessment was investigated. As a result of these analyses, it was found that individual denominations, which were mostly Christian denominations, did not differ in terms of aggregate delinquency and endorsement of the absolute statement. However, people who identified with a religion were significantly more likely, than those not affiliating with a religion, to endorse the absolute statement as well as participate less frequently in various delinquent behaviors.

If it is true that interpreting religious doctrine and placing it as a guiding point in one's life encourages gist based thinking – especially since a majority of respondents were affiliated with some form of Christian denomination – then the bivariate correlations showing a positive relationship between increased religious service attendance and increased absolute endorsement are consistent with this hypothesis. The results from the current study suggest that religious commitment is related to increases in categorical processing. However, religious commitment

and categorical processing seem to be contributing unique variance to delinquent behavior as seen in the following analyses.

Delinquency

Conventional factors (e.g., amount of time without adult supervision) were found to have influenced various risky behaviors that adolescents participated in. This was especially prominent as adolescents grew older and seemed to participate in more frequent delinquency. However, there were several protective factors that emerged acting against the forces pushing adolescents toward a lifestyle of antisocial behavior. Living with both parents who were well educated was consistent with the hypothesis that there were protective factors against delinquent behavior. Getting better grades and spending less time without adult supervision were also important contributing factors. As predicted by fuzzy-trace theory, endorsement of the absolute and relative statements suggested that processing information in a more categorical manner was related to decreases in delinquency. Note that when participants selected the relative statement they were also more likely to commit more frequent delinquent behaviors.

Religion, Categorical/Ordinal Endorsement, and Delinquency

The results from the current study found significant mediations and a significant moderation but point toward a more important relationship between the endorsement of gist principles and the reduction in delinquent behavior. Participants who endorsed only the absolute statement were significantly more religious and committed significantly less delinquent behavior than other participants. Endorsement of the absolute statement was a significant mediator in the relationship between religious commitment and aggregate delinquency. The relationship between religious commitment and the frequency of skipping school was also mediated by the endorsement of the absolute statement. The endorsement of the absolute statement also

significantly contributed to the strength of the relationship between aggregate religious commitment and illegal drug use. There are important implications from the fact that endorsements of the absolute principle as well as the aggregate commitment to religion were explaining unique variance in the frequency of adolescent delinquency.

Together, increases in gist principles and religious commitment were associated with decreases in the frequency of delinquency. When adolescents were attending religious services and making personal commitments to their religion, they were also reinforcing the ability to process information in gist-based forms. Both of these factors were related to decreases in skipping school, tobacco use, marijuana use, illegal drug use, and underage sexual behavior.

Higgins and Albrecht (1977) hypothesized that church attendance and religiosity may only influence the commission of extremely serious offenses and not the lesser ones. This assertion can be discounted given that the current study demonstrated significant correlations between religious service attendance and lesser offenses such as skipping school. In fact, the frequency of attendance at religious services did not have the strongest relationship with delinquent behavior. Religious importance and the aggregate religious commitment scale possessed significant correlations related to lesser offenses such as skipping school. If our study was to have included more serious offenses, additional errors might have occurred due to floor effects.

Religious importance was found to be a better predictor of delinquency than the aggregate religious commitment scale, the other individual religious items, or separate religious denominations. However, while religious importance was more strongly related to aggregate delinquency, the aggregate religious commitment scale included measures for attending religious activities and services as well as a measure on how important religion was to the participant,

thereby encompassing more varied measures of the religious lifestyle. When both items were used in the analyses similar results were produced. The aggregate religious commitment scale was therefore used to represent a wider range of behavior that would constitute religious commitment.

When simultaneous linear regressions were included in the analyses, multicollinearity between predictor variables was important to address as predictor variables were added to the analysis. Multicollinearity is where two or more predictors in a regression model are highly correlated. When items are correlated in a multiple regression model, these variables often indicate how well the entire group of independent variables predict the dependent variable but might not give valid results about any individual predictor.

When predictor variables are correlated in a multiple regression model, these variables may fight over shared variance which could erratically alter regression coefficients. Due to correlations between variables, individual coefficient estimates may not necessarily reflect valid estimates for that particular item. Rather, correlated predictors have the potential to indicate how well the entire bundle of predictors predicts the outcome variable. A potential multicollinearity relationship could be found between the increase in age and the increase in time without adult supervision. Both of these variables were significantly related to an increase in the frequency of aggregate delinquent behavior but were also positively correlated with one another. In order to partially account for correlations between predictor variables, variables were added to the linear regression in a consecutive manner to observe changes in regression coefficients when inter-correlated variables were added.

Linear regressions were first conducted with the absolute and relative endorsement statements in addition to the religious commitment scale. The absolute (categorical) risk

assessment item significantly explained some of the variance in the frequency of aggregate delinquency as did aggregate religious commitment. This shows that religious commitment is not only related to decreases in delinquency, but that endorsement of the absolute statement (and potentially categorical thinking) is also contributing unique variance to aggregate delinquent behavior even when controlling for the other factors. While the endorsement of the relative statement just missed significance, it does show up in later regressions as a significant predictor.

In a subsequent linear regression, the ages of participants as well as their gender were added as additional predictor variables. Age was positively related to the aggregate delinquency scale suggesting that while categorical thinking and religious commitment are acting against delinquent behavior, simply getting older is related to more delinquent behavior as well. The gender of participants was not significant.

As adolescents get older, it often seems reasonable for parents to grant them more responsibility. With greater responsibility often comes less direct supervision by their parents or other adults. So, while age and time without adult supervision may be positively related with one another, the amount of time that an adolescent spends without adult supervision can be regarded as a distinct concept from the desire to actually commit delinquent behavior. Age may be related to increased exploration and the desire to experience new opportunities while less supervised time may be related to greater opportunities to explore. The difference between desire and opportunity allows these two variables, despite the possibility of multicollinearity, to exist simultaneously in a linear regression. When the amount of time that adolescents spend each day without adult supervision is added as a predictor variable to the preceding regression (absolute endorsement, relative endorsement, aggregate religious commitment, age, and gender), increases in time without adult supervision significantly predicts increases in aggregate delinquency. In

addition, increased endorsement of the relative statement is significantly related with increases in delinquency. This suggests that endorsement of the absolute statement is related to significant decreases in delinquency while endorsement of the relative statement is associated with significant increases in delinquency. Race and ethnicity (Hispanic and African-American) were added to the regression but did not add unique variance beyond the other predictors already in the analysis.

Gist-based risk assessments possess a significant relationship with the frequency of overall delinquent behavior in addition to increased religious commitment. However, even though both categorical and ordinal risk statements suggest that lower risk outcomes are preferable, the absolute phrasing (none versus some) produced a significant result that was in the opposite direction of those who endorsed the relative statement (less versus more), a surprising prediction of fuzzy-trace theory. The successful mediation of the absolute statement on aggregate delinquency suggests that categorical thinking can have a protective effect on delinquent behavior.

Limitations

There are limitations to keep in mind when working with data from a previously collected database. Additional personality scales or other individual difference measures of interest were not included since the subjects had already been surveyed. However, since multiple measures of religion and delinquency were asked, fairly comprehensive analyses were able to be conducted.

An important caveat to point out when measuring adolescent attendance at religious or after school activities is the fact that adolescents may not have full transportation privileges being underage. As mentioned in Laird et al. (2011), adolescent attendance may be related to parental attendance at these functions as well as parental religious importance. It would have

been helpful to survey parent's religious commitment and importance in comparison to their child's. A parent's religious background could substantially influence religious effect and shape family norms concerning delinquent behavior and alcohol consumption in particular (Stark, 1996). The family, and context, may influence an adolescent's religiosity and perceived importance of God in his or her own life. Unfortunately, parents of adolescents who participated were not surveyed in the present study.

Also with inclusion of the "born-again" category in the religious affiliation question it was difficult to parse out individual denominations. The born-again denominational category could have been comprised of multiple denominations. According to Smith (1990), 56.3% of non-denominational Protestants self-reported being born-again compared to 13.6% of Catholics. So despite this category being mixed, it does seem to match more closely with non-denominational Protestants in the current study with regards to religious commitment, religious importance, and the frequency of delinquent activity. However, it is preferred to not have respondents describe themselves as born-again, but rather to classify them based on their responses to statements about their religious beliefs (Kinnaman & Lyons, 2007). In The Barna Group surveys (2004, 2005), born-again was defined as people who said they had (a) made a personal commitment to Jesus that is still important today and (b) that they also believe when they die they will go to heaven because (c) they had confessed their sins and (d) accepted Jesus Christ as their savior. Being classified as "born again" was not dependent on any church, denominational affiliation, or involvement (Kinnaman & Lyons, 2007). Despite this self-classified category in the present study, this group did have the highest averages for aggregate religious commitment and religious importance. They also had the lowest average of delinquent behavior.

Future Directions

Future studies might examine the links between parental religious commitment, religious importance, and delinquency in comparison to their child's. As seen in the previous study, there are potential links between parent involvement and adolescent delinquency. Whether these involvements are religious activities or after school sports, this would help to clarify some of these alternative factors influencing delinquent behavior.

Asking about the moral beliefs that adolescents possess behind specific acts of delinquency would help to separate out head versus heart issues. Asking about the frequency of the delinquent activity is one thing, but if the participant does not have a strong moral obligation to avoid that activity, then they might actually be making a rational choice. According to Burkett and White (1974), religiously based moral judgments and beliefs in supernatural sanctions (though weak) did effectively deter youths from using alcohol, marijuana, and perhaps other crimes.

Investigating specific ethnic groups may help to explain different mechanisms behind the relationship between religious commitment and delinquency. According to the present study, African-Americans were significantly more religious than Hispanics or Whites. The Barna Group (2004, 2005) also found that out of eight elements of religious behavior, African-Americans were at the high end of religious activity for half of those items. Out of all of the major racial and ethnic groups, African-Americans were the most likely to report a formal religious affiliation (Pew Research Center, 2008). African-Americans also have a unique historical experience that has affected their social and political attitudes (Cohen et al., 2009).

Since the abolition of slavery, they have often been subject to oppression of their civil and political liberties which has focused their perceptions of group interests and social justice (Sears & Savalei, 2006).

Based on the importance of ethnicity, it would be helpful to look at Asian-Americans and how religion affects their delinquent activity while attempting to investigate if a more absolute perspective is present as well, given that many come from an Eastern culture. Today, Asian-Americans are the highest-income, best-educated, and fastest growing racial group in the United States according to a study by the Pew Research Center (June 19, 2012). It would be prudent to understand this new rising class and what mechanisms might be driving their perceived success in American culture.

References

- Adam, M. B., & Reyna, V. F. (2005). Coherence and correspondence criteria for rationality: Experts' estimation of risks of sexually transmitted infections. *Journal of Behavioral Decision Making, 18*(3), 169-186. doi:10.1002/bdm.493
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology, 5*(4), 432-443. doi:10.1037/h0021212
- Almond, G. A., Appleby, R. S., & Sivan, E. (2003). *Strong religion: The rise of fundamentalisms around the world*. Chicago: University of Chicago Press.
- Antoun, R. T. (2001). *Understanding fundamentalism: Christian, Islamic, and Jewish movements*. Walnut Creek, CA: AltaMira Press.
- Baier, C. J., & Wright, B. R. E. (2001). "If you love me, keep my commandments": A meta-analysis of the effect of religion on crime. *Journal of Research in Crime and Delinquency, 38*(1), 3-21. doi:10.1177/0022427801038001001
- Baumeister, S., & Tossman, P. (2005). Association between early onset of cigarette, alcohol and cannabis use and later drug use patterns: An analysis of a survey in European metropolises. *European Addiction Research, 11*(2), 92-98. doi:10.1159/000083038
- Berger, K. S. (2006). *The developing person: Through childhood and adolescence*. New York: Worth Publishers.
- Brainerd, C. J., Reyna, V. F., & Zember, E. (2011). Theoretical and forensic implications of developmental studies of the DRM illusion. *Memory & Cognition, 39*(3), 365-380. doi:10.3758/s13421-010-0043-2
- Burkett, S. R., & White, M. (1974). Hellfire and delinquency: Another look. *Journal for the Scientific Study of Religion, 13*(4), 455-462.

- Byrnes, J. P. (1998). *The nature and development of decision making: A self-regulation model*. Mahwah, N.J: L. Erlbaum Associates.
- Centers for Disease Control and Prevention (2006). *Youth risk behavior surveillance: United States, 2005*. Morbidity and Mortality Weekly Report, 55.
- Chassin, L., Hussong, A., Barrera Jr., M., Molina, B. S. G., Trim, R., & Ritter, J. (2004). Adolescent substance use. In Lerner, R. M., & Steinberg, L. D. (Eds.), *Handbook of adolescent psychology* (2nd ed., pp.665-696). Hoboken, NJ: John Wiley & Sons.
- Cochran, J. K. (1989). Another look at delinquency and religiosity. *Sociological Spectrum*, 9(2), 147-162.
- Cochran, J. K., Beeghley, L., & Bock, E. (1988). Religiosity and alcohol behavior: An exploration of reference group theory. *Sociological Forum*, 3(2), 256.
- Cohen, A. B., & Hill, P. C. (2007). Religion as culture: Religious individualism and collectivism among American Catholics, Jews, and Protestants. *Journal of Personality*, 75(4), 709-742. doi:10.1111/j.1467-6494.2007.00454.x
- Cohen, A. B., Hall, D. E., Koenig, H. G., & Meador, K. G. (2005). Social versus individual motivation: Implications for normative definitions of religious orientation. *Personality and Social Psychology Review*, 9(1), 48-61. doi:10.1207/s15327957pspr0901_4
- Cohen, A. B., Sundie, J. M., Thoemmes, F., Hill, E. D., Malka, A., & Hill, P. C. (2009). Race as a moderator of the relationship between religiosity and political alignment. *Personality and Social Psychology Bulletin*, 35(3), 271-282. doi:10.1177/0146167208328064
- Constable, T. L. (2010). *Thomas Constable's Notes on the Bible*. Fort Worth: Tyndale Seminary Press.

- De Bellis, M. D., Clark, D. B., Beers, S. R., Soloff, P. H., Boring, A. M., Hall, J., . . . Keshavan, M. S. (2000). Hippocampal volume in adolescent-onset alcohol use disorders. *American Journal of Psychiatry*, *157*(5), 737-744. doi:10.1176/appi.ajp.157.5.737
- Desmond, S. A., Soper, S. E., Purpura, D. J., & Smith, E. (2009). Religiosity, moral beliefs, and delinquency: Does the effect of religiosity on delinquency depend on moral beliefs? *Sociological Spectrum*, *29*(1), 51-71. doi:10.1080/02732170802480527
- Ellickson, P. L., Tucker, J. S., Klein, D. J., & Saner, H. (2004). Antecedents and outcomes of marijuana use initiation during adolescence. *Preventive Medicine*, *39*(5), 976-984. doi:10.1016/j.ypmed.2004.04.013
- Emerson, M., & Hartman, D. (2006). The rise of religious fundamentalism. *Annual Review of Sociology*, *32*, 127-144. doi:10.1146/annurev.soc.32.061604.123141
- Glueck, S., & Glueck, E. T. (1950). *Unraveling juvenile delinquency*. New York: Commonwealth Fund.
- Gorsuch, R. L., & McFarland, S. C. (1972). Single vs. multiple-item scales for measuring religious values. *Journal for The Scientific Study Of Religion*, *11*(1), 53-64.
- Gottfredson, D. C., Gerstenblith, S. A., Soulé, D. A., Womer, S. C., & Lu, S. (2004). Do after school programs reduce delinquency? *Prevention Science: The Official Journal of the Society for Prevention Research*, *5*(4), 253-266. doi:10.1023/B:PREV.0000045359.41696.02
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.
- Gullone, E., & Moore, S. (2000). Adolescent risk-taking and the five-factor model of personality. *Journal of Adolescence*, *23*(4), 393-407. doi:10.1006/jado.2000.0327

- Hadaway, C., Marler, P., & Chaves, M. (1993). What the polls don't show: A closer look at U.S. church attendance. *American Sociological Review*, 58(6), 741-752.
- Herr, N. R. (2006, October 2). Mediation with dichotomous outcomes. Retrieved from: <http://nrherr.bol.ucla.edu/Mediation/logmed.html>
- Higgins, P. C., & Albrecht, G. L. (1977). Hellfire and delinquency revisited. *Social Forces*, 55(4), 952-958.
- Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality. Implications for physical and mental health research. *The American Psychologist*, 58(1), 64-74. doi:10.1037/0003-066X.58.1.64
- Hingson, R., Heeren, T., Jamanka, A., & Howland, J. (2000). Age of drinking onset and unintentional injury involvement after drinking. *JAMA – Journal of the American Medical Association*, 284(12), 1527-1533.
- Hirschi, T., & Stark, R. (1969). Hellfire and delinquency. *Social Problems*, 17(2), 202-213. doi:10.1525/sp.1969.17.2.03a00050
- Hunter, J. D. (1991). *Culture wars: The struggle to define America*. New York: Basic Books.
- James, W. (1958). *The varieties of religious experience*. New York: Penguin.
- Jensen, G., & Erickson, M. L. (1979). The religious factor and delinquency: Another look at the Hellfire hypothesis. In R. Wuthnow (Ed.), *The Religious Dimension* (pp. 157-177). New York, NY: Academic Press.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. (2005). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2004* (NIH Publication No. 05-5726). Bethesda, MD: National Institute on Drug Abuse.

- Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, 58(9), 697-720. doi:10.1037/0003-066X.58.9.697
- Kinnaman, D., & Lyons, G. (2007). *Unchristian: What a new generation really thinks about Christianity-- and why it matters*. Grand Rapids, Mich: Baker Books.
- Klaczynski, P. (2005). Metacognition and cognitive variability: A dual-process model of decision making and its development. In J. Jacobs & P. Klaczynski (Eds.) *The development of judgment and decision making in children and adolescents* (pp. 39-76). Mahway, NJ: Erlbaum.
- Kohlberg, L. (2008). The development of children's orientations toward a moral order: I. sequence in the development of moral thought. *Human Development*, 51(1), 8.
- Laird, R. D., Marks, L. D., & Marrero, M. D. (2011). Religiosity, self-control, and antisocial behavior: Religiosity as a promotive and protective factor. *Journal of Applied Developmental Psychology*, 32(2), 78-85.
- MacKinnon, D. P., & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, 17, 144-158.
- McCullough, M. E., & Willoughby, B. L. B. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological Bulletin*, 135(1), 69-93. doi:10.1037/a0014213
- Mills, B., Reyna, V. F., & Estrada, S. (2008). Explaining contradictory relations between risk perception and risk taking. *Psychological Science*, 19(5), 429-433. doi:10.1111/j.1467-9280.2008.02104.x

- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100(4), 674-701. doi:10.1037/0033-295X.100.4.674
- Nurius, P.S., Hudson, W.W., Daley, J.G., & Newsome, R.D. (1988). A short-form scale to measure peer relations dysfunction. *Journal of Social Service Research*, 13, 57-69.
- Nye, F. I. (1958). *Family relationships and delinquent behavior*. New York: Wiley.
- O'Dell, L. E., Bruijnzeel, A. W., Ghozland, S., Markou, A., & Koob, G. F. (2004). Nicotine withdrawal in adolescent and adult rats. *Annals of the New York Academy of sciences*, 1021, 167-174.
- Patton, M. C. (2011, May 17). The difference between an evangelical and a fundamentalist in a nutshell. [Web log post]. Retrieved from <http://www.reclaimingthemind.org/blog/2011/05/what-is-the-difference-between-and-evangelical-and-a-fundamentalist/>
- Petts, R. J. (2009). Family and religious characteristics' influence on delinquency trajectories from adolescence to young adulthood. *American Sociological Review*, 74(3), 465-483.
- Pew Research Center. (2008, February). U.S. religious landscape survey religious affiliation: Diverse and dynamic. *The Pew Forum on Religion and Public Life*. Retrieved from: <http://religions.pewforum.org/reports>
- Pew Research Center. (2012, June 19). The rise of Asian Americans. Retrieved from: <http://www.pewsocialtrends.org/2012/06/19/the-rise-of-asian-americans/>
- Piper, J. (2006, September 5). Why memorize scripture? Retrieved from <http://www.desiringgod.org/resource-library/taste-see-articles/why-memorize-scripture>
- Pratt, J. B. (1934). *The religious consciousness: A psychological study*. New York: Macmillan.

- Preacher, K. J., & Leonardelli, G. J. (2001). Interactive mediation tests. Retrieved from <http://www.quantpsy.org/sobel/sobel.htm>
- Religion. (n.d.). In *Merriam-Webster.com*. Retrieved from <http://www.merriam-webster.com/dictionary/religion>
- Reyna, V. F. (1996). Conceptions of memory development with implications for reasoning and decision making. *Annals of Child Development, 12*, 87-118.
- Reyna, V. F. (2004). How people make decisions that involve risk a dual-processes approach. *Current Directions in Psychological Science, 13*(2), 60-66. doi:10.1111/j.0963-7214.2004.00275.x
- Reyna, V. F., & Adam, M. B. (2003). Fuzzy-trace theory, risk communication, and product labeling in sexually transmitted diseases. *Risk Analysis: An Official Publication of the Society for Risk Analysis, 23*(2), 325-342. doi:10.1111/1539-6924.00332
- Reyna, V. F., & Brainerd, C. J. (1992). A fuzzy-trace theory of reasoning and remembering: paradoxes, patterns, and parallelism. In N. Hearst, S. Kosslyn, & R. Shiffrin (Eds.), *From learning processes to cognitive processes: Essays in honor of William K. Estes* (pp. 235-259).
- Reyna, V. F., & Brainerd, C. J. (1995). Fuzzy-trace theory: An interim synthesis. *Learning and Individual Differences, 7*(1), 1-75. doi:10.1016/1041-6080(95)90031-4
- Reyna, V. F., & Brainerd, C. J. (2011). Dual processes in decision making and developmental neuroscience: A fuzzy-trace model. *Developmental Review, 31*(2), 180-206. doi:10.1016/j.dr.2011.07.004
- Reyna, V. F., & Ellis, S. C. (1994). Fuzzy-trace theory and framing effects in children's risky decision making. *Psychological Science, 5*(5), 275-279.

- Reyna, V. F., & Farley, F. (2006). Risk and rationality in adolescent decision making: Implications for theory, practice, and public policy. *Psychological Science in the Public Interest*, 7(1), 1-44. doi:10.1111/j.1529-1006.2006.00026.x
- Reyna, V. F., & Kiernan, B. (1994). Development of gist versus verbatim memory in sentence recognition: Effects of lexical familiarity, semantic content, encoding instructions, and retention interval. *Developmental Psychology*, 30(2), 178-191. doi:10.1037/0012-1649.30.2.178
- Reyna, V. F., & Lloyd, F. J. (2006). Physician decision making and cardiac risk: Effects of knowledge, risk perception, risk tolerance, and fuzzy processing. *Journal Of Experimental Psychology: Applied*, 12(3), 179-195. doi:10.1037/1076-898X.12.3.179
- Reyna, V. F., & Rivers, S. E. (2008). Current theories of risk and rational decision making. *Developmental Review*, 28(1), 1-11. doi:10.1016/j.dr.2008.01.002
- Reyna, V. F., Adam, M. B., Poirier, K., LeCroy, C.W., & Brainerd, C. J. (2005). Risky decision-making in childhood and adolescence: A fuzzy-trace theory approach. In J. Jacobs & P. Klaczynski (Eds.), *The development of judgment and decision-making in children and adolescents* (pp. 77 – 106). Mahway, NJ: Erlbaum.
- Reyna, V. F., Estrada, S. M., DeMarinis, J. A., Myers, R. M., Stanis, J. M., & Mills, B. A. (2011). Neurobiological and memory models of risky decision making in adolescents versus young adults. *Journal of Experimental Psychology. Learning, Memory, and Cognition*, 37(5), 1125-1142. doi:10.1037/a0023943
- Reyna, V. F., Lloyd, F. J., & Brainerd, C. J. (2003). Memory, development, and rationality: An integrative theory of judgment and decision making. In S. L. Schneider & J. Shanteau

- (Eds.), *Emerging perspectives on judgment and decision research* (pp. 201-245). New York, NY: Cambridge University Press.
- Reynolds, W.M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38, 119-125.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General And Applied*, 80(1), 1-28.
doi:10.1037/h0092976
- Sears, D. O., & Savalei, V. (2006). The political color line in America: Many “Peoples of color” or black exceptionalism? *Political Psychology*, 27(6), 895-924. doi:10.1111/j.1467-9221.2006.00542.x
- Sloman, S. A. (1996). The empirical case for two systems of reasoning. *Psychological Bulletin*, 119(1), 3-22. doi:10.1037/0033-2909.119.1.3
- Smith, C. (2003). Theorizing religious effects among American adolescents. *Journal for the Scientific Study of Religion*, 42(1), 17-30.
- Smith, T. W. (1990). Classifying protestant denominations. *Review of Religious Research*, 31(3), 225-245.
- Stanovich, K. E., & West, R. F. (2000). Individual differences in reasoning: Implications for the rationality debate? *Behavioral and Brain Sciences*, 23(5), 645-665.
doi:10.1017/S0140525X00003435
- Stark, R. (1984). Religion and Conformity: Reaffirming a sociology of religion. *SA: Sociological Analysis*, 45(4), 273-282.
- Stark, R. (1996). Religion as context: Hellfire and delinquency one more time. *Sociology of Religion*, 57(2), 163-173.

- Streyffeler, L. L., & McNally, R. J. (1998). Fundamentalists and liberals: Personality characteristics of protestant Christians. *Personality and Individual Differences, 24*(4), 579-580. doi:10.1016/S0191-8869(97)00189-X
- The Barna Group. (2001). Religious beliefs vary widely by denomination. Retrieved from <http://www.barna.org/barna-update/article/5-barna-update/53-religious-beliefs-vary-widely-by-denomination>
- The Barna Group. (2004). Ethnic groups differ substantially on matters of faith. Retrieved from <http://www.barna.org/barna-update/article/5-barna-update/193-ethnic-groups-differ-substantially-on-matters-of-fait>
- The Barna Group. (2005). Commitment to Christianity depends on how it is measured. Retrieved from <http://www.barna.org/barna-update/article/5-barna-update/168-commitment-to-christianity-depends-on-how-it-is-measured>
- Travers, J. F., & Davis, R. G. (1961). A study of religious motivation and delinquency. *Journal of Educational Sociology, 34*(5), 205-220.
- United States Census Bureau. (2011). *World Population Clock*. Retrieved from <http://www.census.gov/population/popclockworld.html>
- Vaughan, E. L., de Dios, M. A., Steinfeldt, J. A., & Kratz, L. M. (2011). Religiosity, alcohol use attitudes, and alcohol use in a national sample of adolescents. *Psychology of Addictive Behaviors, 25*(3), 547-553. doi:10.1037/a0024660
- White, A. M., & Swartzwelder, H. S. (2004). Hippocampal function during adolescence: A unique target of ethanol effects. *Annals of the New York Academy of Sciences, 1021*(1), 206-220. doi:10.1196/annals.1308.026

Zimmer-Gembeck, M. J., & Helfand, M. (2008). Ten years of longitudinal research on U.S. adolescent sexual behavior: Developmental correlates of sexual intercourse, and the importance of age, gender and ethnic background. *Developmental Review*, 28(2), 153-224. doi:10.1016/j.dr.2007.06.001

Zuckerman, P. (2007). Atheism: Contemporary numbers and patterns. In M. Martin, M. Martin (Eds.), *The Cambridge companion to atheism* (pp. 47-65). New York, NY: Cambridge University Press. doi:10.1017/CCOL0521842700.004

APPENDIX A

Original Survey

Print the first letter of your **first** name. _____

Print the first letter of your **middle** name. _____

Print the first letter of your **last** name. _____

What is your birth date?

Month _____ Day _____ Year you were born _____

Are you male or female?

Male(Boy) _____ Female(Girl) _____

Today's date:

Month _____ Day _____ Year _____

About you...

1. Select the one group that best describes you:

Caucasian/White

Mexican-American/Chicano

Central American/South American/Puerto Rican/Cuban

African-American/Black

Asian-American

Native American (Tribe: _____)

Mixed Ethnicity (example: Chicano and Native American): Write which groups you belong to here: _____

2. How old are you? _____

3. What grade are you in? _____

4. Where do you live **right now**? (*check only one*)

I live with both parents (no step-parents)

I live with a single parent

I live with a parent and step-parent

I live part time with both families (both parents have custody)

I live with other relatives (not my parents)

I live in a group home

I live with a foster family

I live on my own or with friends



5. What is the zipcode for the place you usually live?

____ _ I don't know _____

6. Do you receive a free lunch from school?
 Yes No I don't know
7. What kind of grades do you **usually** get in school? (*check only one*)
 A's B's C's D's F's
8. What is the highest level your father completed in school? (*check only one*)
 He completed less than 12th grade (less than high school)
 He graduated from high school
 He had some college after high school
 He graduated from a 4 year college or more
 Don't know
9. What is the highest level your mother completed in school? (*check only one*)
 She completed less than 12th grade (less than high school)
 She graduated from high school
 She had some college after high school
 She graduated from a 4 year college or more
 Don't know
10. How far do you think you will go in school? (*check only one*)
 Won't finish high school
 Will graduate from high school
 Will attend some college but probably won't complete 4 years
 Will graduate from a 4 year college or more

11. In general, how many hours per day are you without any adult supervision? *(check only one)*

Less than 1 hour

1-2 hours

3-4 hours

More than four hours

12. How important would you say religion is to you? *(check only one)*

Not at all important

Slightly important

Somewhat important

Important

Very important

13. What is your religious affiliation? *(optional)*

Catholic

Protestant (Methodist, Lutheran, Baptist, etc.)

Jewish

Born-again Christian

Latter-Day Saints (Mormons)

Other (please write in _____)

No religion



In the last six months...

How often have you done the following?

	Never	Have done It Once or Twice	About Once a Month	About Once a Week	Almost Every Day
14. Stolen something.....	0	1	2	3	4
15. Skipped school (ditching).....	0	1	2	3	4
16. Taken part in church-sponsored or religious activities or youth groups	0	1	2	3	4
17. Damaged property/graffiti (tagging).....	0	1	2	3	4
18. Been in after school activities or clubs (for example, sports, debate team, drama club).....	0	1	2	3	4
19. Smoked cigarettes or chewed tobacco.....	0	1	2	3	4
20. Smoked marijuana (pot).....	0	1	2	3	4
21. Attended a religious or spiritual service (e.g. church or synagogue).....	0	1	2	3	4
22. Used illegal drugs such as cocaine, meth or LSD (This does not include prescribed medicine).....	0	1	2	3	4
23. Drank alcohol (beer, wine or hard liquor).....	0	1	2	3	4

In this survey you are asked about having sex and about abstinence. Having sex is sometimes also called “going all the way,” “doing it,” or “making love.” The word abstinence is also used a lot in this survey. Abstinence means waiting to have sex. The survey also asks questions about HIV. HIV is the virus that causes AIDS.

24. ___ Yes ___ No Have you ever had a class about sex education?
25. ___ Yes ___ No Have you ever had a class about birth control (like condoms (rubbers) and birth control pills)?
26. ___ Yes ___ No Have you ever taken a class about abstinence (not having sex)? (Abstinence only classes teach that waiting until marriage to have sex is the only healthy choice.)



Family Relationships...

When we say “mother” or “father,” we mean the parent that you live with. This might be a stepparent or a foster parent.

If you do not live with a parent, please circle (5) for “do not live with this parent.”

	Strongly Disapprove	Disapprove	Neither Disapprove nor Approve	Approve	Strongly Approve	Do Not Live With This Parent
27. How would your mother feel about your having sex at this time in your life?.....	0	1	2	3	4	5
28. How would your mother feel about your having sexual intercourse with someone who was special to you and whom you knew well, like a steady boyfriend/girlfriend?.....	0	1	2	3	4	5
	Strongly Disapprove	Disapprove	Neither Disapprove nor Approve	Approve	Strongly Approve	Do Not Live With This Parent
29. How would your father feel about your having sex at this time in your life?.....	0	1	2	3	4	5
30. How would your father feel about your having sexual intercourse with someone who was special to you and whom you knew well, like a steady boyfriend/girlfriend?.....	0	1	2	3	4	5



What do you think?

Here are several statements. There is no right or wrong answer, we want to know what you think. Do you agree or disagree with the statement? Please circle the answer that you believe. The choices are strongly disagree (0), disagree (1), neither disagree nor agree (2), agree (3), and strongly agree (4).

By birth control, we mean anything that reduces the risk of pregnancy.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
31. Most of <u>my friends</u> believe people my age should wait until they are older before they have sex.....	0	1	2	3	4
32. If you keep having unprotected sex, risk adds up and you WILL get pregnant or get someone pregnant.....	0	1	2	3	4
33. Most of <u>my friends</u> believe condoms (rubbers) should always be used if a person my age has sex <u>if the girl DOES NOT use birth control pills</u>	0	1	2	3	4
34. Most <u>adults who are important to me</u> believe it's OK for people my age to have sex with a steady boyfriend or girlfriend.....	0	1	2	3	4
35. If you can't handle getting protection, you are not ready for sex.....	0	1	2	3	4
36. Most of <u>my friends</u> believe a person my age should not get pregnant.....	0	1	2	3	4
37. <u>I believe</u> condoms (rubbers) should always be used if a person my age has sex, <u>even if the two people know each other very well</u>	0	1	2	3	4
38. Most <u>adults who are important to me</u> believe condoms (rubbers) should always be used if a person my age has sex <u>if the girl DOES NOT use</u>	0	1	2	3	4

birth control.....

	0	1	2	3	4
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
39. The AMOUNT of risk does not matter if the outcome is really bad for you.....	0	1	2	3	4
40. Most of <u>my friends</u> believe it's OK for people my age to have sex with a steady boyfriend or girlfriend.....	0	1	2	3	4
41. If you do not get pregnant or get someone pregnant right away, it probably won't happen.....	0	1	2	3	4
42. Most <u>adults who are important to me</u> believe a person my age should not get pregnant.....	0	1	2	3	4
43. When in doubt about having sex, delay or avoid it.....	0	1	2	3	4
44. <u>I believe</u> condoms (rubbers) should always be used if a person my age has sex <u>if the girl DOES NOT use birth control</u>	0	1	2	3	4
45. Most <u>adults who are important to me</u> believe condoms (rubbers) should always be used if a person my age has sex, <u>even if the two people know each other very well</u>	0	1	2	3	4
46. If you keep having unprotected sex, risk adds up and you WILL get a sexually transmitted disease.....	0	1	2	3	4
47. <u>I believe</u> a person my age should not get pregnant.....	0	1	2	3	4
48. Most of my friends have not had sex yet.....	0	1	2	3	4
49. Most <u>adults who are important to me</u> believe people my age should wait until they are older before they have sex.....	0	1	2	3	4
50. You can't always decide to have sex later because you may miss your chance with that person.....	0	1	2	3	4



	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
51. Most of <u>my friends</u> believe some kind of birth control should always be used if a person my age has sex.....	0	1	2	3	4
52. Even low risks add up to 100% if you keep doing it.....	0	1	2	3	4
53. <u>I believe</u> condoms (rubbers) should always be used if a person my age has sex, <u>even if the girl USES birth control pills</u>	0	1	2	3	4
54. <u>I believe</u> it's OK for people my age to have sex with a steady boyfriend or girlfriend.....	0	1	2	3	4
55. Most <u>adults who are important to me</u> believe some kind of birth control should always be used if a person my age has sex.....	0	1	2	3	4
56. It only takes ONCE to get pregnant or get an STD.....	0	1	2	3	4
57. <u>I believe</u> people my age should wait until they are older before they have sex.....	0	1	2	3	4
58. Most of <u>my friends</u> believe condoms (rubbers) should always be used if a person my age has sex, <u>even if the girl USES birth control pills</u>	0	1	2	3	4
59. Most people my age have already had sex.....	0	1	2	3	4
60. The AMOUNT of benefits and AMOUNT of risk matter when deciding to have sex.....	0	1	2	3	4
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

61. Most <u>adults who are important to me</u> believe condoms (rubbers) should always be used if a person my age has sex, <u>even if the girl USES birth control pills</u>	0	1	2	3	4
62. I <u>believe</u> birth control should always be used if a person my age has sex.....	0	1	2	3	4
63. Even low risks happen to someone.....	0	1	2	3	4
64. Most of <u>my friends</u> believe condoms (rubbers) should always be used if a person my age has sex, <u>even if the two people know each other very well</u>	0	1	2	3	4



What About These Reasons...

Please answer all of the following questions whether you have had sex or not.

I might choose NOT to have sex because:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
65. I could get a sexually transmitted disease (STD) such as herpes, genital warts, or gonorrhea.....	0	1	2	3	4
66. I could get AIDS (Acquired Immune Deficiency Syndrome).....	0	1	2	3	4
67. I do not want to be a teen parent.....	0	1	2	3	4
68. I want to save my virginity for the person I marry.....	0	1	2	3	4
69. I do not want to have any regrets.....	0	1	2	3	4
70. I'm not ready to have sex.....	0	1	2	3	4
71. My parents would freak out if they thought I was having sex.....	0	1	2	3	4
72. I want people to like me for who I am, not because they think I will have sex.....	0	1	2	3	4

73. I am not going out with anyone right now.....	0	1	2	3	4
74. The person I wanted to have sex with didn't want to have sex with me.....	0	1	2	3	4

Again, please answer all of the following questions whether you have had sex or not.

I might choose TO HAVE sex because:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
75. I think it will feel good.....	0	1	2	3	4
76. I want to have a child soon.....	0	1	2	3	4
77. I am very curious about it.....	0	1	2	3	4
78. I think that having sex makes someone a man/woman.....	0	1	2	3	4
79. I am in love.....	0	1	2	3	4
80. I am ready to accept the responsibility of having sex.....	0	1	2	3	4
81. I feel mature enough to make this decision.....	0	1	2	3	4
82. I think having sex brings you closer together and strengthens your relationship.....	0	1	2	3	4
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
83. Sex would help my partner and I learn more about each other.....	0	1	2	3	4
84. It seems like everyone else is doing it.....	0	1	2	3	4



What do you believe?

Again, by birth control, we mean anything that reduces the risk of pregnancy.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
85. A condom (rubber) is not necessary if I know my partner.....	0	1	2	3	4
86. I really want to have sex in the next year.....	0	1	2	3	4
87. If one of my friends were deciding whether or not to have sex, I would tell him/her to wait.....	0	1	2	3	4
88. People who use condoms (rubbers) sleep around a lot.....	0	1	2	3	4
89. You make your own luck; behavior determines your risk.....	0	1	2	3	4
90. It is OK for unmarried teens to have sex if they are in love.....	0	1	2	3	4
91. Being alone is a warning signal for sex.....	0	1	2	3	4
92. If I got an STD it would be embarrassing to me.....	0	1	2	3	4
93. I would not put my unborn baby at risk by having unprotected sex.....	0	1	2	3	4
94. I wouldn't use a condom (rubber) if my partner refused.....	0	1	2	3	4
95. People who carry condoms (rubbers) are just looking for sex.....	0	1	2	3	4



Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

96. Condoms (rubbers) protect against sexually transmitted diseases.....	0	1	2	3	4
97. A condom (rubber) is not necessary when my partner and I agree not to have sex with anyone else.....	0	1	2	3	4
98. Using drugs or alcohol is a warning signal for sex.....	0	1	2	3	4
99. Using a condom (rubber) shows my partner I care about him/her.....	0	1	2	3	4
100. If I'm not careful, I could catch a sexually transmitted disease.....	0	1	2	3	4
101. People having sex should use birth control if they are not ready to have a baby.....	0	1	2	3	4
102. I would not put my partner at risk by having unprotected sex.....	0	1	2	3	4
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
103. People who carry condoms (rubbers) would have sex with anyone.....	0	1	2	3	4
104. Condoms (rubbers) create a sense of safety.....	0	1	2	3	4
105. If my partner suggested using a condom (rubber), I would think he/she was only being cautious.....	0	1	2	3	4
106. Condoms (rubbers) protect against pregnancy.....	0	1	2	3	4
107. Condoms (rubbers) are so ineffective it is not worth using them.....	0	1	2	3	4
108. I worry that I could catch a sexually transmitted disease.....	0	1	2	3	4
109. The AMOUNT of risk is what matters; low risks are better than high risks.....	0	1	2	3	4

110. Being pressured or controlled in any way is a warning signal for unwanted sex.....	0	1	2	3	4
111. A condom (rubber) is not necessary if I am pretty sure the other person doesn't have a sexually transmitted disease.....	0	1	2	3	4
112. If I got an STD it would not be all that bad.....	0	1	2	3	4



	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
113. I am likely to have HIV/AIDS by age 25.....	0	1	2	3	4
114. In general, birth control is too expensive to buy.....	0	1	2	3	4
115. If someone is planning to be abstinent, he or she doesn't need to know about other kinds of birth control.....	0	1	2	3	4
116. It takes too much planning to have birth control on hand when you are going to have sex.....	0	1	2	3	4
117. If I used birth control my friends might think I was looking for sex.....	0	1	2	3	4
118. I am likely to get (a girl) pregnant in next 6 months.....	0	1	2	3	4
119. More people should be aware of the importance of birth control.....	0	1	2	3	4
120. I am likely to have a STD by age 25.....	0	1	2	3	4
121. In general, birth control is too much of a hassle to use.....	0	1	2	3	4

122. If I got an STD, my friends would lose respect for me.....	0	1	2	3	4
123. I am likely to have HIV/AIDS in the next 6 months.....	0	1	2	3	4
124. It is too hard to get a partner to use birth control.....	0	1	2	3	4
125. Getting HIV is no big deal anymore.....	0	1	2	3	4
126. It is easy for me to get birth control.....	0	1	2	3	4
127. Using birth control is morally wrong.....	0	1	2	3	4
128. Even if you use condoms, eventually you'll get an STD if you have sex enough.....	0	1	2	3	4
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
129. I am likely to have STD in the next 6 months.....	0	1	2	3	4
130. Using birth control would interfere with sexual enjoyment.....	0	1	2	3	4
131. Once you have HIV/AIDS, there is no second chance.....	0	1	2	3	4
132. To me, using protection means (<i>check only one</i>) <input type="checkbox"/> no risk <input type="checkbox"/> some risk					



Imagine what would happen if you had a baby [became a parent] while you were still a teenager in high school. Which of these things do you think would happen?

Strongly Disagree **Disagree** **Neither Agree nor Disagree** **Agree** **Strongly Agree**

133. My family would not approve.....	0	1	2	3	4
134. I would feel like someone really needs me.....	0	1	2	3	4
135. It would be the first time I had something that was truly mine.....	0	1	2	3	4
136. I might marry the wrong person, just to get married.....	0	1	2	3	4
137. My family would be supportive.....	0	1	2	3	4
138. I'd be able to make enough money to support the baby and myself.....	0	1	2	3	4
139. At this time in my life it would be one of the worst things that could happen to me.....	0	1	2	3	4
140. My boyfriend/girlfriend would be more committed to me.....	0	1	2	3	4
141. I would feel more like an adult.....	0	1	2	3	4
142. My family would let me continue to live at home.....	0	1	2	3	4
143. I would feel like I had truly done something meaningful in life.....	0	1	2	3	4
144. It wouldn't be all that bad at this time in my life.....	0	1	2	3	4
145. I'd still be able to finish my high school education.....	0	1	2	3	4
146. It would be embarrassing for me.....	0	1	2	3	4
147. My family would help me to raise the baby.....	0	1	2	3	4
148. I would never be lonely.....	0	1	2	3	4
149. I would have to decide whether or not to have the baby and that would be stressful.....	0	1	2	3	4

150. Would you consider having a child if you were not married? (*check only one*)

I already have a child/children.

I definitely **would** consider it.

I might consider it.

I definitely **would not** consider it.



Decisions...



Again, by birth control, we mean anything that reduces the risk of pregnancy.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
151. I can say no to sex in a way that won't hurt the other person's feelings.....	0	1	2	3	4
152. I could succeed in using birth control when I have sex.....	0	1	2	3	4
153. I would find it difficult to use a condom (rubber) when I have sex.....	0	1	2	3	4
154. I feel comfortable refusing to have sex.....	0	1	2	3	4
155. I am not sure I could use birth control when I have sex.....	0	1	2	3	4
156. I could succeed in using a condom (rubber) when I have sex.....	0	1	2	3	4
157. I know how to avoid having sex if I don't want to do it.....	0	1	2	3	4
158. I would find it difficult to use birth control when I have sex.....	0	1	2	3	4
159. I am not sure I could use a condom (rubber) when I have sex.....	0	1	2	3	4
160. I know ways to make my body language say NO to sex.....	0	1	2	3	4

161. Which of the following principles apply to **YOUR** decision (check **ALL** that apply):

- Better to wait than to have sex when you are not ready.
- Better to have fun (sex) while you can.
- Better to not have sex than hurt my parents/family.
- Better to focus on school than have sex.
- Better to be liked than not have sex.
- Better to do what feels good now than worry all the time about the future.
- Better to not have sex than risk getting HIV/AIDS
- Better to not have sex than risk getting pregnant or getting someone pregnant.
- Better to be safe than sorry.
- I have a responsibility to God to wait to have sex.
- I have a responsibility to myself to wait to have sex.
- I have a responsibility to my parents/family to not have sex.
- I have a responsibility to my partner to not put him/her at risk.
- More partners mean more risk.
- Avoid risk.
- Known partners are safe partners.
- Living is better than dying.
- Less risk is better than more risk.
- No risk is better than some risk.
- Having sex is taking a calculated risk.
- Having sex is worth risking HIV/AIDS.
- Having sex is worth risking pregnancy.
- Having a relationship is better than not taking a risk.

_____ Having sex is better than losing a relationship.

_____ Having your self-respect is better than having sex.

Other (please fill
in) _____

The Future...

Please, answer these questions whether or not you have had sex.

	Very Unlikely	Unlikely	Don't Know	Likely	Very Likely
162. Do you intend to use a condom (rubber) when you have sex?.....	0	1	2	3	4
163. Do you think you will have sex (or have sex again) before you turn 20?.....	0	1	2	3	4
164. Do you think you will actually use birth control when you have sex?.....	0	1	2	3	4
165. Do you think you will have sex (or have sex again) before you are in a serious relationship or in love?.....	0	1	2	3	4
166. If you were going to have sex, would you prefer to use a condom (rubber)?.....	0	1	2	3	4
167. Do you intend to use birth control when you have sex?.....	0	1	2	3	4
168. Do you think you will have sex (or have sex again) before you are finished with high school?.....	0	1	2	3	4
169. Do you think you will actually use a condom (rubber) when you have sex?.....	0	1	2	3	4
170. Do you think you will have sex (or have sex again) during the next year?.....	0	1	2	3	4
171. If you were going to have sex, would you prefer to use birth control?.....	0	1	2	3	4
172. Do you think you will have sex (or have sex again) before you get married?.....	0	1	2	3	4



The Really Personal Stuff About You...

Please read the following questions and think about them carefully. Remember that your answers are **private** and **will not be shown** to your parents, teachers or program leaders.

173. Have you ever kissed a boy or a girl on the mouth?.....	Yes	No
174. Have you ever open-mouth kissed a boy or a girl?.....	Yes	No
175. Have you ever fooled around (sexually) above the waist?.....	Yes	No
176. Have you ever fooled around (sexually) below the waist?.....	Yes	No
177. Have you ever had sex?.....	Yes	No
178. Have you had sex in the last 30 days?.....	Yes	No
179. Have you ever been treated by a doctor for an STD (e.g. chlamydia, gonorrhea, etc.)?.....	Yes	No

180. How likely is it that you will get tested for HIV/STDs in the next 6 months?

_____ Very unlikely

_____ Unlikely

_____ Don't know

_____ Likely

_____ Very likely

181. Do you have a boyfriend or girlfriend right now? _____ Yes _____ No

How long have you been dating this person? _____

How old is this person? _____

182. *If you have had sex*, how old were you the first time you had sex? _____

____ I have never had sex

183. *If you have had sex, how many total people have you had sex with?*

Number of male (boy) partners ____

Number of female (girl) partners ____

____ I have never had sex

184. *If you have had sex, what method(s) of birth control did you and your partner use to prevent pregnancy **the first***

time you had sex? (check all that apply)

____ I have never had sex

____ No method was used

____ Birth control pill

____ Condom (rubber)

____ Some other method (ex. Diaphragm, IUD)

____ I am not sure

185. *If you have had sex, what method(s) of birth control did you and your partner use to prevent pregnancy **the last***

time you had sex? (check all that apply)

____ I have never had sex

____ No method was used

____ Birth control pill

____ Condom (rubber)

____ Some other method (ex. Diaphragm, IUD)

____ I am not sure



186. *If you have had sex, do you plan to stop having sex and start practicing abstinence?*

____ I have never had sex

____ Yes - I plan to stop having sex/or have already stopped

____ No - I do not plan to stop having sex

187. *If you have had sex*, did you drink alcohol or use drugs before you had sex **the first time**?

I have never had sex

Yes, alcohol

Yes, drugs

Yes, both drugs and alcohol

No, neither were used when I had sex

188. *If you have had sex*, did you drink alcohol or use drugs before you had sex **the last time**?

I have never had sex

Yes, alcohol

Yes, drugs

Yes, both drugs and alcohol

No, neither were used

189. *If you have had sex*, how many times have you been pregnant or gotten someone pregnant?

I have never had sex

0 times

1 time

2 or more times

Not sure

190. *If you have children of your own*, how many do you have?

I have no children

1 child

2 children

3 or more children

191. Are you or your partner(s) currently pregnant? ____ Yes ____ No
192. Are you currently married? ____ Yes ____ No
193. Have you ever had vaginal sex? ____ Yes ____ No
194. Have you ever had oral sex? ____ Yes ____ No
195. Have you ever had anal sex? ____ Yes ____ No
196. In the last three months, have you ever had vaginal, oral, and/or anal sex?
 ____ **no** (If no, please complete **Section A**, numbers 197-198)
 ____ **yes** (If yes, please complete **Section B**, numbers 199-214)

Section A: No sex in the last three months.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
197. I did not have sex in the last three months because it is against my values and beliefs..	0	1	2	3	4
198. I did not have sex in the last three months because I didn't have the chance or the opportunity.....	0	1	2	3	4

Please continue on to Number 215



Section B: Yes, sex in the last three months.

The following questions ask about your sexual activities during the past three months. If you had sex during the PAST THREE MONTHS think about what took place. Please mark your answer in the space provided. If a number is zero, please write "0". Please be sure to mark an answer in every blank, even if that answer is zero.

199. In the last three months, I have had vaginal, oral, and/or anal sex with _____ number of partners.
200. In the last three months, I had vaginal (regular) sex _____ times.
201. In the last three months, I had vaginal (regular) sex with _____ number of partners.
202. If you used contraception in the last 3 months, how many times did you use:
- _____ birth control pills
 - _____ condoms (rubbers)
 - _____ condoms (rubbers) and foam
 - _____ withdrawal
 - _____ diaphragm
 - _____ IUD
 - _____ Norplant (implants)
 - _____ Depo Provera (the shot)

203. In the last three months, I **refused** to have vaginal (regular) sex **without** a condom _____ times.
204. In the last three months, I had oral sex _____ times.
205. In the last three months, I had oral sex **USING** a condom _____ times.
206. In the last three months, I had oral sex with _____ number of partners.
207. In the last three months, I **refused** to have oral sex **without** a condom _____ times.
208. In the last three months, I had anal (rectal) sex _____ times.
209. In the last three months, I had anal (rectal) sex **USING** a condom _____ times.
210. In the last three months, I had anal (rectal) sex with _____ number of partners.
211. In the last three months, I **refused** to have anal (rectal) sex **without** a condom _____ times.
212. Of those times you used a condom in the last three months, how many total times did the condom break? ____
213. Of those times you used a condom in the last three months, how many total times did the condom slip off during sex or while the male partner was pulling out? ____

214. Of those times you used a condom in the last three months, how many total times did you put the condom on after you started sex or take it off before you finished having sex? _____



Facts...

Read each statement carefully and then circle your answer.

	It Is False	Probably False	Could Be Either True or False	Probably True	It Is True
215. One way to REDUCE the risk of STDs (including HIV/AIDS), is for you and your partner to get tested.....	0	1	2	3	4
216. Vaseline can be used with condoms (rubbers), and they will work just as well.....	0	1	2	3	4
217. HIV can be spread by sharing a needle with a drug user who has HIV or AIDS.....	0	1	2	3	4
218. It is a myth that you have sex with everyone your partner has had sex with because germs don't live that long.....	0	1	2	3	4
219. Teenagers who use withdrawal do not have to worry about pregnancy.....	0	1	2	3	4
220. Using a condom (rubber) can lower your chance of getting HIV.....	0	1	2	3	4

221.	One way to REDUCE the risk of STDs (including HIV/AIDS), is to not have multiple partners.....	0	1	2	3	4
222.	A girl can't get pregnant the first time she has sex.....	0	1	2	3	4
223.	You can always tell if someone has HIV by looking at them.....	0	1	2	3	4
				Could Be Either True or False		
		It Is False	Probably False		Probably True	It Is True
224.	A girl can prevent pregnancy by douching immediately after sex.....	0	1	2	3	4
225.	The only way to have NO risk of STDs or pregnancy is to not have sex.....	0	1	2	3	4
226.	You can have the HIV virus without being sick from AIDS.....	0	1	2	3	4
227.	Taking birth control pills is one way to protect yourself from becoming infected with the HIV virus.....	0	1	2	3	4
228.	Viruses like herpes are not curable; you have them and can give them to others for the rest of your life.....	0	1	2	3	4
229.	To REDUCE the risk of STDs (including HIV/AIDS), other than not having sex, the second best thing to do is to use condoms.....	0	1	2	3	4
230.	The pill is as effective as abstinence.....	0	1	2	3	4
231.	A pregnant woman with HIV can give HIV to her unborn baby.....	0	1	2	3	4
232.	There's a high chance of getting HIV if you get a blood transfusion.....	0	1	2	3	4
233.	There is a cure for HIV/AIDS.....	0	1	2	3	4

234.	To use a condom (rubber) correctly, a person must hold it on the penis while pulling out of the vagina.....	0	1	2	3	4
235.	Latex condoms (rubbers) prevent HIV better than animal skin condoms (rubbers).....	0	1	2	3	4
236.	If a girl forgets to take her pill for three days, she is still protected from pregnancy.....	0	1	2	3	4
237.	You are at risk of getting STDs from everyone your partner has had sex with and everyone your partner's partners have had sex with, and so on....	0	1	2	3	4
238.	Condoms eliminate the risk of BOTH STDs and pregnancy.....	0	1	2	3	4
239.	Using condoms lowers the risk of getting STDs (including HIV/AIDS) by a BIG amount for a single act.....	0	1	2	3	4
240.	One way to REDUCE the risk of STDs (including HIV/AIDS) or pregnancy, is to limit sex-have fewer partners and less sex.....	0	1	2	3	4
241.	ONLY condoms and not having sex protect against BOTH STDs and pregnancy.....	0	1	2	3	4



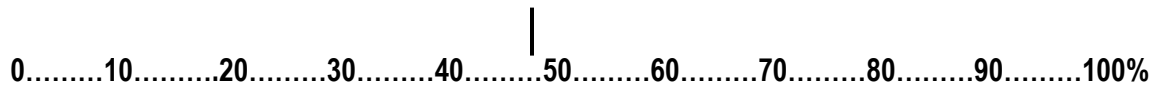
What's the risk?

In the next section we are going to be asking you about risk. When we say sexually transmitted infection we are including Human Papillomavirus (causes genital warts).

When necessary, use the following scale, which ranges from 0% risk (no risk at all) to 100% (completely certain) by placing a mark on the number line as shown below.

EXAMPLE:

A woman is pregnant, what is the chance she will have a boy?



242. Which of the following best describes **YOUR** chances of having a sexually transmitted disease?

Check one: NONE LOW MEDIUM HIGH

243. What are the chances that **YOU** have a sexually transmitted disease?

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

244. Overall, for **YOU** which of the following best describes the **BENEFITS** of having sex?

Check one: NONE LOW MEDIUM HIGH



245. Overall, for **YOU** which of the following best describes the **RISKS** of having sex?

Check one: NONE LOW MEDIUM HIGH

246. Which of the following is a better description of **YOUR** options regarding sex (check **ONE**)?

Choosing between having more benefits and more risk versus having fewer benefits and less risk.

Choosing between having some benefits with no risk versus taking a risk.

247. What is the risk of a teenager getting pregnant or getting someone pregnant if he or she has sex over a one year time period (more than once a month) and doesn't use anything for birth control?

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

248. What is the **effectiveness (if someone always used them perfectly)** in preventing pregnancy for the following birth controls?

A. Abstinence (no sexual activity)

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

B. Birth control pills

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

C. Condoms (rubbers)

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

D. Depo-Provera (injectable)

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

E. Diaphragm

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

F. Withdrawal

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

249. What is the risk a sexually active teenager would have of contracting the following sexually transmitted infections?

A. Chlamydia

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%



B. Gonorrhea (clap)

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

C. HIV or AIDS

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

D. Human Papillomavirus (causes genital warts)

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

E. Syphilis

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

F. Herpes (Type 1 or 2)

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

250. A young woman's risk of contracting a sexually transmitted infection including Human Papillomavirus (HPV) jumps by (the percentage it increases by)

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

with each new sexual partner.

251. An urban teenage female had a sexually transmitted infection 7 months ago and was treated. She continues to be sexually active. What is the risk that she has another STI now?

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

252. An urban teenage female had a sexually transmitted infection 7 months ago and was treated. She continues to be sexually active. What is the risk that her male contact has another STI now?
 0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

253. A young women’s risk of contracting any of the following: Human Papillomavirus (HPV), or HIV, or Chlamydia, or Genital herpes, or Syphilis, or Gonorrhea jumps by (the percentage it increases by)
 0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

with each new sexual partner.

254. Suppose condoms (rubbers) are 90% effective in reducing the risk for sexual transmission of disease X and 70% effective in reducing the risk for disease Y. (Disease X and disease Y are equally common.) Then condoms (rubbers) would be 70% effective for reducing the risk of transmission for any of these diseases.

The Centers for Disease Control and Prevention (CDC) have stated that, "Condom (rubber) use reduces the risk for gonorrhea, herpes simplex virus (HSV) infection, genital ulcers, and pelvic inflammatory disease. In addition, intact latex condoms (rubbers) provide a continuous mechanical barrier to HIV, HSV, hepatitis B virus, *Chlamydia trachomatis*, and *Neisseria gonorrhoea*."

This means that when used consistently and correctly condoms (rubbers) are

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

effective in reducing the risk for getting any of these diseases.

255. FDA package labeling on some condoms (rubbers) says the following, "If used properly, latex condoms (rubbers) will help to reduce the risk of transmission of HIV infection (AIDS) and many other sexually transmitted diseases, including chlamydia, genital herpes, genital warts, gonorrhea, hepatitis B, and syphilis" (Trojan-enz package label).

This means that when used consistently and correctly condoms (rubbers) are

0.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100%

effective in reducing the risk of transmission of HIV infection (AIDS) and many other sexually transmitted infections, including chlamydia, genital herpes, genital warts, gonorrhea, hepatitis B, and syphilis.

256. Suppose the prevalence of Disease X in the population in general is 10%. A doctor performs a diagnostic test, which has a sensitivity of 80% (80% of those who actually have the disease will have a positive result) and a specificity of 80% (80% of those who actually do not have the disease will have a negative result). The test result is positive. What is the probability of disease?

Check one:

_____ 30%

_____ 70%

257. How confident are you about this probability judgment? Check one rating from the 1-7 scale below:

_____ 1= No confidence at all (guess)

_____ 2= Very low confidence

_____ 3= Low confidence

_____ 4= Medium confidence

_____ 5= High confidence

_____ 6= Very high confidence

_____ 7= Complete confidence



258. Which sex is biologically more susceptible to contracting a sexually transmitted infection when they have sex with someone who is already infected?

_____ Men

_____ Women

_____ They have about the same risk

259. Suzy is 16 years old and is a high school drop out. She dresses like a "Hoochie-Mama." Suzy has been having sex for a year (since she was 15). She admits that she has "slept around" and has had sex with 12 different guys. She comes to the doctor for a routine check-up.

Juanita is 16 years old and attends high school. She is deeply religious and quite shy. She has had one steady boyfriend, Jorge, and they have been going together for a year. Juanita and Jorge are sexually active, but they plan to be married in six months. Jorge used to be a player (he has had sex with a dozen former girlfriends). However, Jorge has been completely faithful to Juanita. She comes to the doctor for a routine check-up.

Assume that everything said about Suzy and Juanita is TRUE and that everything not mentioned here is the SAME for both Suzy and Juanita.

At the time of routine check-up who is at greater risk of having a sexually transmitted disease?

Check one.

Suzy

Juanita

They have about the same risk

Juanita is at no risk of contracting a sexually transmitted infection because Jorge is completely faithful to her.

True

False



More about you...

260. What language do you speak most often?

English

English and Spanish equally

Spanish

Another language (which one: _____)

261. As far as you know, where were each of these people in your family born?

Yourself United States Mexico Other Country (please fill
in _____)

Your Mother United States Mexico Other Country (please fill
in _____)

Your Father United States Mexico Other Country (please fill
in _____)

Your Grandmother on your mother's side of the family

United States Mexico Other Country (please fill in _____)

Your Grandmother on your father's side of the family

United States Mexico Other Country (please fill in _____)

Your Grandfather on your mother's side of the family

United States Mexico Other Country (please fill in _____)

Your Grandfather on your father's side of the family

United States Mexico Other Country (please fill in _____)

**Almost
Never**

Sometimes

Often

**Almost
Always**

262. How often do you speak English in general?.....	1	2	3	4
263. How often do you speak English with your friends?.....	1	2	3	4
264. How often do you speak English with your family?.....	1	2	3	4
265. How often do you think in English?.....	1	2	3	4
266. How often do you speak Spanish in general?.....	1	2	3	4
267. How often do you speak Spanish with your friends?.....	1	2	3	4
268. How often do you speak Spanish with your family?.....	1	2	3	4
269. How often do you think in Spanish?.....	1	2	3	4
270. How often do you watch television programs in English?.....	1	2	3	4
271. How often do you listen to radio programs in English?.....	1	2	3	4
272. How often do you listen to music in English?.....	1	2	3	4
273. How often do you watch television programs in Spanish?.....	1	2	3	4
274. How often do you listen to radio programs in Spanish?.....	1	2	3	4
275. How often do you listen to music in Spanish?.....	1	2	3	4

Please read the following questions and think about them carefully. Circle whether you feel the statement is **true** or **false** about yourself.

276. It is sometimes hard for me to go on with my work if I am not encouraged.....	TRUE	FALSE
277. I sometimes feel resentful when I don't get my way.....	TRUE	FALSE
278. On a few occasions, I have given up doing something because I thought too little of my ability.....	TRUE	FALSE
279. There have been times when I felt like rebelling against people in authority even though I knew they were right.....	TRUE	FALSE
280. No matter who I'm talking to, I'm always a good listener.....	TRUE	FALSE
281. There have been occasions when I took advantage of someone.....	TRUE	FALSE
282. I'm always willing to admit it when I make a mistake.....	TRUE	FALSE
283. I sometimes try to get even, rather than forgive and	TRUE	FALSE

forget.....		
284. I am always courteous, even to people who are disagreeable.....	TRUE	FALSE
285. I have never been irked when people expressed ideas very different from my own.....	TRUE	FALSE
286. There have been times when I was quite jealous of the good fortune of others.....	TRUE	FALSE
287. I am sometimes irritated by people who ask favors of me.....	TRUE	FALSE
288. I have never deliberately said something that hurt someone's feelings.....	TRUE	FALSE



The following questions ask you about the way you feel about the people you work, play, or associate with most of the time; your peer group. Please read and answer each question as carefully and accurately as you can by circling the choice you believe. The choices are rarely or none of the time (1), a little of the time (2), some of the time (3), a good part of the time (4), and most or all of the time (5).

	Rarely or None of the Time	A Little of the Time	Some of the Time	A Good Part of the Time	Most or All of the Time
289. I get along very well with my peers.	1	2	3	4	5
290. My peers act like they don't care about me.	1	2	3	4	5
291. My peers treat me badly.	1	2	3	4	5
292. My peers really seem to respect me.	1	2	3	4	5

293. I don't feel like I am "part of the group."	1	2	3	4	5
294. My peers are a bunch of snobs.	1	2	3	4	5
295. My peers really understand me.	1	2	3	4	5
296. My peers seem to like me very much.	1	2	3	4	5
297. I really feel "left out" of my peer group.	1	2	3	4	5
298. I hate my present peer group.	1	2	3	4	5
299. My peers seem to like having me around	1	2	3	4	5
300. I really like my present peer group.	1	2	3	4	5
301. I really feel like I am disliked by my peers.	1	2	3	4	5
302. I wish I had a different peer group.	1	2	3	4	5
303. My peers are very nice to me.	1	2	3	4	5

	Rarely or None of the Time	A Little of the Time	Some of the Time	A Good Part of the Time	Most or All of the Time
304. My peers seem to look up to me.	1	2	3	4	5
305. My peers think I am important to them.	1	2	3	4	5
306. My peers are a real source of pleasure to me.	1	2	3	4	5
307. My peers don't seem to even notice me.	1	2	3	4	5
308. I wish I were not part of this peer group.	1	2	3	4	5
309. My peers regard my ideas and opinions very highly.	1	2	3	4	5
310. I feel like I am an important member of my peer group.	1	2	3	4	5
311. I can't stand to be around my peer group.	1	2	3	4	5
312. My peers seem to look down on me.	1	2	3	4	5
313. My peers really do not interest me.	1	2	3	4	5

APPENDIX B

Descriptive Statistics

Table B.1
Ages 14 to 17 years-old

	Frequency	Percent	Cumulative Percent
<=14	131	16.2	16.2
15	307	38.0	54.3
16	228	28.3	82.5
>=17	141	17.5	100.0
Total	807	100.0	

Table B.2
Gender

	Frequency	Percent	Cumulative Percent
Male	329	40.8	40.8
Female	478	59.2	100.0
Total	807	100.0	

Table B.3*Ethnicity*

	Frequency	Percent	Cumulative Percent
Caucasian/White	363	45.0	45.0
Mexican-American/Chicano	118	14.6	59.6
Central American/South American/Puerto Rican/Cuban	9	1.1	60.7
African-American/Black	224	27.8	88.5
Asian-American	30	3.7	92.2
Native American	2	.2	92.4
Mixed Ethnicity	61	7.6	100.0
Total	807	100.0	

Table B.4*Ethnicity*

	Frequency	Percent	Cumulative Percent
Caucasian/White	363	45.0	45.0
Mexican, Central, or South American	127	15.7	60.7
African-American/Black	224	27.8	88.5
Other	93	11.5	100.0
Total	807	100.0	

Table B.5
Free Lunch

	Frequency	Percent	Cumulative Percent
No	568	70.4	70.4
Yes	239	29.6	100.0
Total	807	100.0	

Table B.6
Living Situation

	Frequency	Percent	Cumulative Percent
Both Parents	388	48.1	48.4
Single Parent	203	25.2	73.8
Parent & Step-Parent	154	19.1	93.0
Part Time w/ Both	30	3.7	96.8
Other Relatives	17	2.1	98.9
Group Home	1	.1	99.0
Foster Family	4	.5	99.5
On My Own/With Friends	4	.5	100.0
Total	801	99.3	
Missing	6	.7	
Total	807	100.0	

Table B.7
Living Situation (Recoded)

	Frequency	Percent	Cumulative Percent
Live w/ Both Parents	390	48.3	48.3
Live w/ One Parent	206	25.5	73.9
Other Living Arrangement	211	26.1	100.0
Total	807	100.0	

Table B.8
Time Without Adult Supervision

	Frequency	Percent	Cumulative Percent
Less than 1 hour	83	10.3	10.3
1-2 hours	189	23.4	33.7
3-4 hours	201	24.9	58.6
More than 4 hours	334	41.4	100.0
Total	807	100.0	

Table B.9
Highest Level of Education (Father)

	Frequency	Percent	Cumulative Percent
Completed Less Than HS	85	10.5	10.6
Graduated from HS	147	18.2	28.9
Some College	163	20.2	49.2
Graduated from 4yr College	218	27.0	76.3
Don't Know	190	23.5	100.0
Total	803	99.5	
Missing	4	.5	
Total	807	100.0	

Figure B.10
Highest Level of Education (Mother)

	Frequency	Percent	Cumulative Percent
Completed Less Than HS	81	10.0	10.1
Graduated from HS	169	20.9	31.1
Some College	203	25.2	56.4
Graduated from 4yr College	239	29.6	86.2
Don't Know	111	13.8	100.0
Total	803	99.5	
Missing	4	.5	
Total	807	100.0	

Table B.11
Average Parental Education

	Frequency	Percent	Cumulative Percent
Some High School	50	6.2	6.8
In Between	36	4.5	11.7
Graduated High School	140	17.3	30.9
In Between	94	11.6	43.7
Some College	150	18.6	64.2
In Between	91	11.3	76.6
Graduated College	171	21.2	100.0
Total	732	90.7	
Missing	75	9.3	
Total	807	100.0	

Table B.12
Usual Grades in School

	Frequency	Percent	Cumulative Percent
A'S	236	29.2	29.2
B'S	378	46.8	76.1
C'S	161	20.0	96.0
D'S	21	2.6	98.6
F'S	11	1.4	100.0
Total	807	100.0	

Table B.13
Religious Affiliation

	Frequency	Percent	Cumulative Percent
Catholic	184	22.8	22.9
Protestant	233	28.9	51.8
Jewish	10	1.2	53.0
Born-again Christian	155	19.2	72.3
Mormon	16	2.0	74.3
Other	81	10.0	84.3
No religion	126	15.6	100.0
Total	805	99.8	
Missing	2	.2	
Total	807	100.0	

Table B.14
Religious Affiliation (Recoded)

	Frequency	Percent	Cumulative Percent
Catholic	184	22.8	22.9
Protestant	233	28.9	51.8
Born-again Christian	155	19.2	71.1
Other	107	13.3	84.3
No religion	126	15.6	100.0
Total	805	99.8	
Missing	2	.2	
Total	807	100.0	

Table B.15
Aggregate Religious Commitment Scale

	Frequency	Percent	Cumulative Percent
0 (Least)	60	7.4	7.4
1	51	6.3	13.8
2	55	6.8	20.6
3	71	8.8	29.4
4	78	9.7	39.0
5	77	9.5	48.6
6	89	11.0	59.6
7	70	8.7	68.3
8	81	10.0	78.3
9	71	8.8	87.1
10	81	10.0	97.1
11	19	2.4	99.5
12 (Most)	4	.5	100.0
Total	807	100.0	

Table B.16
Importance of Religion

	Frequency	Percent	Cumulative Percent
Not at all important	97	12.0	12.0
Slightly important	92	11.4	23.4
Somewhat important	163	20.2	43.6
Important	238	29.5	73.1
Very important	217	26.9	100.0
Total	807	100.0	

Table B.17
Frequency of Religious Activities

	Frequency	Percent	Cumulative Percent
Never	279	34.6	34.6
One or two times	223	27.6	62.2
Once a month	107	13.3	75.5
Once a week	165	20.4	95.9
Almost every day	33	4.1	100.0
Total	807	100.0	

Table B.18
Frequency of Religious Service Attendance

	Frequency	Percent	Cumulative Percent
Never	203	25.2	25.2
One or two times	170	21.1	46.2
Once a month	113	14.0	60.2
Once a week	295	36.6	96.8
Almost every day	26	3.2	100.0
Total	807	100.0	

Table B.19
Frequency of After School Activity Attendance

	Frequency	Percent	Cumulative Percent
Never	170	21.1	21.1
One or two times	109	13.5	34.6
Once a month	67	8.3	42.9
Once a week	160	19.8	62.7
Almost every day	301	37.3	100.0
Total	807	100.0	

Table B.20
Aggregate Delinquency Scale

	Frequency	Percent	Cumulative Percent
0	133	16.5	16.5
1	70	8.7	25.2
2	83	10.3	35.4
3	81	10.0	45.5
4	69	8.6	54.0
5	68	8.4	62.5
6	51	6.3	68.8
7	35	4.3	73.1
8	46	5.7	78.8
9	33	4.1	82.9
10	16	2.0	84.9
11	19	2.4	87.2
12	26	3.2	90.5
13	14	1.7	92.2
14	12	1.5	93.7
15	15	1.9	95.5
16	5	.6	96.2
17	4	.5	96.7
18	12	1.5	98.1
19	7	.9	99.0
20	1	.1	99.1
21	1	.1	99.3
23	2	.2	99.5
24	0	0	99.5
25	3	.4	99.9
26	0	0	99.9
27	1	.1	100.0
Total	807	100.0	

Table B.21*Aggregate Delinquency Scale Without Sexual Behavior*

	Frequency	Percent	Cumulative Percent
0 (Least)	215	26.6	26.6
1	136	16.9	43.5
2	101	12.5	56.0
3	79	9.8	65.8
4	55	6.8	72.6
5	42	5.2	77.8
6	32	4.0	81.8
7	26	3.2	85.0
8	29	3.6	88.6
9	18	2.2	90.8
10	16	2.0	92.8
11	17	2.1	94.9
12	4	.5	95.4
13	8	1.0	96.4
14	8	1.0	97.4
15	7	.9	98.3
16	5	.6	98.9
17	3	.4	99.3
19	2	.2	99.5
21	2	.2	99.8
22	1	.1	99.9
23 (Most)	1	.1	100.0
Total	807	100.0	

Table B.22*Delinquency Item: Frequency of Stealing*

	Frequency	Percent	Cumulative Percent
Never	466	57.7	57.7
One or two times	268	33.2	91.0
Once a month	47	5.8	96.8
Once a week	20	2.5	99.3
Almost every day	6	.7	100.0
Total	807	100.0	

Table B.23*Delinquency Item: Frequency of Skipping School*

	Frequency	Percent	Cumulative Percent
Never	532	65.9	65.9
One or two times	186	23.0	89.0
Once a month	33	4.1	93.1
Once a week	40	5.0	98.0
Almost every day	16	2.0	100.0
Total	807	100.0	

Table B.24*Delinquency Item: Frequency of Property Damage and Graffiti*

	Frequency	Percent	Cumulative Percent
Never	659	81.7	81.7
One or two times	119	14.7	96.4
Once a month	17	2.1	98.5
Once a week	8	1.0	99.5
Almost every day	4	.5	100.0
Total	807	100.0	

Table B.25*Delinquency Item: Frequency of Tobacco Use*

	Frequency	Percent	Cumulative Percent
Never	603	74.7	74.7
One or two times	110	13.6	88.4
Once a month	30	3.7	92.1
Once a week	22	2.7	94.8
Almost every day	42	5.2	100.0
Total	807	100.0	

Table B.26*Delinquency Item: Frequency of Marijuana Use*

	Frequency	Percent	Cumulative Percent
Never	578	71.6	71.6
One or two times	122	15.1	86.7
Once a month	44	5.5	92.2
Once a week	37	4.6	96.8
Almost every day	26	3.2	100.0
Total	807	100.0	

Table B.27*Delinquency Item: Frequency of Illegal Drug Use*

	Frequency	Percent	Cumulative Percent
Never	742	91.9	91.9
One or two times	38	4.7	96.7
Once a month	15	1.9	98.5
Once a week	7	.9	99.4
Almost every day	5	.6	100.0
Total	807	100.0	

Table B.28*Delinquency Item: Frequency of Alcohol Use*

	Frequency	Percent	Cumulative Percent
Never	357	44.2	44.2
One or two times	245	30.4	74.6
Once a month	136	16.9	91.4
Once a week	61	7.6	99.0
Almost every day	8	1.0	100.0
Total	807	100.0	

Table B.29*Delinquency Item: Sexual Behavior (Revised - Monotonic)*

	Frequency	Percent	Cumulative Percent
No Sexual Behavior	245	30.4	30.4
Only Above-Waist	101	12.5	42.9
At Most Below-Waist	159	19.7	62.6
At Most Sex With 1 Partner	119	14.7	77.3
Sex with At Least 2 or More Partners	183	22.7	100.0
Total	807	100.0	

Table B.30*Delinquency Item: Number of Total Sexual Partners*

	Frequency	Percent	Cumulative Percent
0	499	61.8	62.6
1	116	14.4	77.2
2	57	7.1	84.3
3	38	4.7	89.1
4	22	2.7	91.8
5	22	2.7	94.6
6	6	.7	95.4
7	8	1.0	96.4
8	1	.1	96.5
9	4	.5	97.0
10	6	.7	97.7
11	2	.2	98.0
12	3	.4	98.4
13	4	.5	98.9
14	1	.1	99.0
15	2	.2	99.2
16	1	.1	99.4
17	1	.1	99.5
20	1	.1	99.6
25	1	.1	99.7
30	2	.2	100.0
Total	797	98.8	
Missing	10	1.2	
Total	807	100.0	

Table B.31
Risk Assessment for Sexual Protection

	Frequency	Percent	Cumulative Percent
No Risk	127	15.7	15.7
Some Risk	680	84.3	100.0
Total	807	100.0	

Table B.32
Absolute Risk Endorsement (None > Some)

	Frequency	Percent	Cumulative Percent
No	202	25.0	25.0
Yes	605	75.0	100.0
Total	807	100.0	

Table B.33
Relative Risk Endorsement (Less > More)

	Frequency	Percent	Cumulative Percent
No	397	49.2	49.2
Yes	410	50.8	100.0
Total	807	100.0	

Table B.34*Means and Standard Deviation for Main Variables*

	Mean	Std. Deviation	N
Absolute Risk (None > Some)	.75	.43	807
Relative Risk (Less > More)	.51	.50	807
Risk Assessment for Sexual Protection	.84	.36	807
Social Desirability Scale Composite Score	.44	.21	807
Index of Peer Relations Composite Score	4.09	.67	807
Importance of Religion	2.48	1.32	807
Frequency of Religious Activities	1.32	1.25	807
Frequency of Religious Service	1.72	1.28	807
Aggregate Religious Commitment Scale	5.51	3.17	807
Frequency of After School Activities	2.39	1.59	807
Frequency of Stealing	.55	.78	807
Frequency of Skipping School	.54	.93	807
Frequency of Tagging	.24	.59	807
Frequency of Tobacco Use	.50	1.06	807
Frequency of Marijuana Use	.53	1.01	807
Frequency of Illegal Drug Use	.14	.53	807
Frequency of Alcohol Use	.91	1.00	807
Risky Sexual Behavior	1.87	1.54	807
Aggregate Delinquency Scale	5.27	4.95	807
Aggregate Delinquency Scale without Sexual Behavior	3.40	4.03	807
Age	15.47	.96	807
Gender	.59	.49	807
Time Without Adult Supervision	2.97	1.03	807
Average Parental Education	2.83	.92	732
Usual Grades in School	2.00	.85	807

Table B.35*Means and Standard Deviations for Main Variables (without Texas/New York 17 year-olds)*

	Mean	Std. Deviation	N
Absolute Risk (None > Some)	.75	.43	688
Relative Risk (Less > More)	.50	.50	688
Risk Assessment for Sexual Protection	.85	.36	688
Social Desirability Scale Composite Score	.44	.21	688
Index of Peer Relations Composite Score	4.09	.65	688
Importance of Religion	2.46	1.32	688
Frequency of Religious Activities	1.34	1.26	688
Frequency of Religious Service	1.72	1.29	688
Aggregate Religious Commitment Scale	5.52	3.20	688
Frequency of After School Activities	2.41	1.57	688
Frequency of Stealing	.58	.78	688
Frequency of Skipping School	.52	.92	688
Frequency of Tagging	.24	.58	688
Frequency of Tobacco Use	.46	.99	688
Frequency of Marijuana Use	.52	.98	688
Frequency of Illegal Drug Use	.14	.54	688
Frequency of Alcohol Use	.87	.98	688
Risky Sexual Behavior	1.76	1.52	688
Aggregate Delinquency Scale	5.09	4.90	688
Aggregate Delinquency Scale without Sexual Behavior	3.33	4.00	688
Age	15.20	.78	688
Gender	.58	.49	688
Time Without Adult Supervision	2.95	1.03	688
Average Parental Education	2.85	.91	620
Usual Grades in School	2.01	.86	688

APPENDIX C

Scale Reliability and Analysis

Table C.1.1
Aggregate Delinquency Scale – Cronbach's Alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.789	.807	8

Table C.1.2
Aggregate Delinquency Scale – Summary

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	.659	.135	1.869	1.734	13.835	.292	8
Item Variances	.950	.281	2.380	2.099	8.477	.432	8

Table C.1.3*Aggregate Delinquency Scale – Item Summary*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
“Stolen something”	4.60	20.787	.416	.237	.784
“Skipped school (ditching)”	4.61	18.923	.561	.336	.763
“Damaged property/graffiti (tagging)”	4.91	21.973	.366	.208	.791
“Smoked cigarettes or chewed tobacco”	4.65	18.072	.573	.372	.760
“Smoked marijuana (pot)”	4.62	17.551	.680	.515	.742
“Used illegal drugs such as cocaine, meth or LSD (This does not include prescribed medicine)”	5.01	21.671	.482	.299	.783
“Drank alcohol (beer, wine or hard liquor)”	4.24	18.196	.604	.382	.755
Sexual Behavior Scale	3.40	16.223	.496	.283	.791

Table C.2.1*Aggregate Religious Commitment Scale – Cronbach's Alpha*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.763	.764	3

Table C.2.2*Aggregate Religious Commitment Scale – Summary*

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.171	1.318	3.478	2.160	2.638	1.321	3
Item Variances	1.645	1.565	1.739	.174	1.111	.008	3

Table C.2.3*Aggregate Religious Commitment Scale – Item Summary*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
“How important would you say religion is to you?”	3.03	5.175	.523	.288	.764
“Taken part in church-sponsored or religious activities or youth groups”	5.19	5.140	.590	.394	.688
“Attended a religious or spiritual service (e.g. church or synagogue)”	4.80	4.671	.678	.470	.586

Table C.3.1
Sexual Behavior – Cronbach’s Alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.806	.805	4

Notes: Sexual Behavior variable was calculated with weighted items. Participants received a 1 if they had only “fooled around above the waist”, a 2 if at most they “fooled around below the waist”, a 3 if at most they had sex with ≤ 1 partner, a 4 if they had sex with at least 2 or more partners.

Table C.3.2
Sexual Behavior – Summary

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	.444	.228	.644	.415	2.819	.033	4
Item Variances	.222	.176	.249	.073	1.414	.001	4

Notes: Sexual Behavior variable was calculated with weighted items. Participants received a 1 if they had only “fooled around above the waist”, a 2 if at most they “fooled around below the waist”, a 3 if at most they had sex with ≤ 1 partner, a 4 if they had sex with at least 2 or more partners.

Table C.3.3
Sexual Behavior – Item Summary

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
“Have you ever fooled around (sexually) above the waist?”	1.13	1.371	.579	.466	.778
“Have you ever fooled around (sexually) below the waist?”	1.25	1.251	.671	.543	.732
“Have you ever had sex?”	1.40	1.261	.694	.594	.720
Total male and female partners	1.55	1.507	.549	.496	.790

Notes: Sexual Behavior variable was calculated with weighted items. Participants received a 1 if they had only “fooled around above the waist”, a 2 if at most they “fooled around below the waist”, a 3 if at most they had sex with ≤ 1 partner, a 4 if they had sex with at least 2 or more partners.

Table C.4.1
Social Desirability Scale – Cronbach's Alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.662	.662	13

Table C.4.2
Social Desirability Scale – Summary

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	.555	.286	.715	.429	2.500	.015	13
Item Variances	.234	.204	.250	.046	1.227	.000	13

Table C.4.3*Social Desirability Scale – Item Summary*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
#1 – “It is sometimes hard for me to go on with my work if I am not encouraged”	6.66	6.925	.243	.122	.651
#2 – “I sometimes feel resentful when I don’t get my way”	6.64	6.638	.363	.173	.632
#3 – “On a few occasions, I have given up doing something because I thought too little of my ability”	6.61	6.935	.246	.145	.650
#4 – “There have been times when I felt like rebelling against people in authority even though I knew they were right”	6.51	6.754	.361	.150	.633
#5 – “No matter who I’m talking to, I’m always a good listener” (reverse coded)	6.93	6.898	.296	.166	.643
#6 – “There have been occasions when I took advantage of someone”	6.70	6.714	.325	.142	.638
#7 – “I’m always willing to admit it when I make a mistake” (reverse coded)	6.79	6.825	.285	.122	.644
#8 – “I sometimes try to get even, rather than forgive and forget”	6.60	6.672	.359	.152	.633
#9 – “I am always courteous, even to people who are disagreeable” (reverse coded)	6.77	6.681	.341	.204	.635

#10 – “I have never been irked when people expressed ideas very different from my own” (reverse coded)	6.66	7.027	.202	.071	.658
#11 – “There have been times when I was quite jealous of the good fortune of others”	6.51	6.957	.269	.103	.647
#12 – “I am sometimes irritated by people who ask favors of me”	6.71	6.831	.277	.104	.646
#13 – “I have never deliberately said something that hurt someone’s feelings” (reverse coded)	6.55	7.042	.216	.097	.655

Table C.5.1
Index of Peer Relations – Cronbach's Alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.943	.944	25

Table C.5.2
Index of Peer Relations – Summary

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	1.902	1.534	2.713	1.179	1.768	.102	25
Item Variances	1.128	.705	1.603	.898	2.274	.040	25

Table C.5.3*Index of Peer Relations – Item Summary*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
#1 – “I get along very well with my peers” (reverse coded)	45.84	281.302	.523	.380	.941
#2 – “My peers act like they don’t care about me”	45.71	273.456	.663	.548	.940
#3 – “My peers treat me badly”	45.98	276.850	.622	.520	.940
#4 – “My peers really seem to respect me” (reverse coded)	45.52	274.427	.607	.487	.940
#5 – “I don’t feel like I am ‘part of the group’”	45.54	273.879	.530	.394	.942
#6 – “My peers are a bunch of snobs”	45.77	277.087	.536	.386	.941
#7 – “My peers really understand me” (reverse coded)	45.06	272.540	.566	.430	.941
#8 – “My peers seem to like me very much” (coded)	45.63	271.499	.707	.611	.939
#9 – “I really feel ‘left out’ of my peer group”	45.76	270.757	.689	.609	.939
#10 – “I hate my present peer group”	46.01	275.462	.633	.596	.940
#11 – “My peers seem to like having me around” (reverse coded)	45.66	271.077	.683	.612	.939
#12 – “I really like my present peer group” (reverse coded)	45.70	270.923	.717	.648	.939
#13 – “I really feel like I am disliked by my peers”	45.92	272.150	.713	.624	.939

#14 – “I wish I had a different peer group”	45.81	271.725	.661	.646	.940
#15 – “My peers are very nice to me” (reverse coded)	45.74	272.961	.721	.620	.939
#16 – “My peers seem to look up to me” (reverse coded)	45.04	279.296	.437	.507	.943
#17 – “My peers think I am important to them” (reverse coded)	45.27	272.892	.627	.684	.940
#18 – “My peers are a real source of pleasure to me” (reverse coded)	45.40	272.766	.629	.549	.940
#19 – “My peers don’t seem to even notice me”	45.96	273.542	.690	.558	.940
#20 – “I wish I were not part of this peer group”	45.94	273.209	.669	.666	.940
#21 – “My peers regard my ideas and opinions very highly” (reverse coded)	44.83	280.307	.350	.250	.944
#22 – “I feel like I am an important member of my peer group” (reverse coded)	45.40	271.363	.643	.534	.940
#23 – “I can’t stand to be around my peer group”	45.91	274.890	.618	.566	.940
#24 – “My peers seem to look down on me”	45.90	274.652	.604	.484	.940
#25 – “My peers really do not interest me”	45.81	274.087	.585	.491	.941

APPENDIX D

Correlations

Table D.1
Pearson Correlations of Main Variables

	Absolute Risk (None > Some)	Relative Risk (Less > More)	Risk Assessment for Sexual Protection	Social Desirability Scale Composite Score	Index of Peer Relations Composite Score
Absolute Risk (None > Some)	1	.25**	.06	-.06	.13**
Relative Risk (Less > More)	.25**	1	-.06	-.09**	.04
Risk Assessment for Sexual Protection	.06	-.06	1	-.07*	.12**
Social Desirability Scale Composite Score	-.06	-.09**	-.08*	1	.10**
Index of Peer Relations Composite Score	.13**	.04	.12**	.11**	1
Importance of Religion	.10**	-.08*	-.01	.06	.15**
Frequency of Religious Activities	.09**	-.02	.02	-.02	.12**
Frequency of Religious Service	.15**	.00	.04	.00	.16**
Aggregate Religious Commitment Scale	.13**	-.04	.02	.01	.17**
Frequency of After School Activities	.09**	-.04	.04	.07*	.18**
Frequency of Stealing	-.03	.04	.00	-.23**	-.07
Frequency of Skipping School	-.11**	-.01	-.09*	-.09*	-.05
Frequency of Property Damage/Graffiti	-.02	-.03	.01	-.15**	-.05
Frequency of Tobacco Use	-.08*	.06	.00	-.11**	-.05
Frequency of Marijuana Use	-.09*	.00	-.02	-.14**	-.03
Frequency of Illegal Drug Use	-.04	.02	.05	-.08*	.00
Frequency of Alcohol Use	-.02	.06	.00	-.15**	.07
Risky Sexual Behavior	-.11**	.08*	-.07*	-.11**	-.06
Aggregate Delinquency Scale	-.11**	.05	-.04	-.19**	-.05
Aggregate Delinquency Scale without Sexual Behavior	-.09*	.04	-.02	-.20**	-.03
Age	.01	.01	-.04	.15**	-.02
Gender	.04	-.06	.06	-.01	.15**
Time Without Adult Supervision	.00	.00	.00	-.03	.06
Average Parental Education	.07	.03	.14**	-.09*	.11**
Usual Grades in School	-.16**	-.04	-.10**	-.05	-.24**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.2*Pearson Correlations of Main Variables (continued)*

	Importance of Religion	Frequency of Religious Activities	Frequency of Religious Service	Aggregate Religious Commitment Scale	Frequency of After School Activities
Absolute Risk (None > Some)	.10**	.09**	.15**	.14**	.09**
Relative Risk (Less > More)	-.08*	-.02	.00	-.04	-.04
Risk Assessment for Sexual Protection	-.01	.02	.04	.02	.04
Social Desirability Scale Composite Score	.06	-.02	.00	.01	.07*
Index of Peer Relations Composite Score	.15**	.12**	.16**	.17**	.18**
Importance of Religion	1	.42**	.53**	.79**	.13**
Frequency of Religious Activities	.42**	1	.62**	.82**	.15**
Frequency of Religious Service	.53**	.62**	1	.87**	.20**
Aggregate Religious Commitment Scale	.79**	.82**	.87**	1	.19**
Frequency of After School Activities	.13**	.15**	.20**	.19**	1
Frequency of Stealing	-.20**	.02	-.06	-.10**	-.70*
Frequency of Skipping School	-.20**	-.06	-.12**	-.16**	-.14**
Frequency of Property Damage/Graffiti	-.11**	.06	-.02	-.03	-.07
Frequency of Tobacco Use	-.19**	-.07	-.11**	-.15**	-.16**
Frequency of Marijuana Use	-.23**	-.09**	-.15**	-.19**	-.15**
Frequency of Illegal Drug Use	-.15**	-.08*	-.09**	-.13**	-.14**
Frequency of Alcohol Use	-.20**	-.06	-.11**	-.15**	-.07*
Risky Sexual Behavior	-.13**	-.06	-.11**	-.12**	-.08*
Aggregate Delinquency Scale	-.27**	-.07*	-.15**	-.20**	-.17**
Aggregate Delinquency Scale without Sexual Behavior	-.28**	-.07	-.15**	-.20**	-.17**
Age	.03	-.04	-.03	-.01	-.03
Gender	.11**	.07*	.09*	.11**	0.04
Time Without Adult Supervision	-.04	.03	.01	.00	.03
Average Parental Education	.04	.17**	.14**	.14**	.14**
Usual Grades in School	-.11**	-.10**	-.13**	-.14**	-.29**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.3*Pearson Correlations of Main Variables (continued)*

	Frequency of Stealing	Frequency of Skipping School	Frequency of Property Damage/Graffiti	Frequency of Tobacco Use	Frequency of Marijuana Use
Absolute Risk (None > Some)	-.03	-.11**	-.02	-.08*	-.09*
Relative Risk (Less > More)	.04	-.01	-.03	.06	.00
Risk Assessment for Sexual Protection	.00	-.09*	.01	.00	-.02
Social Desirability Scale Composite Score	-.23**	-.09*	-.15**	-.11**	-.14**
Index of Peer Relations Composite Score	-.07	-.05	-.05	-.05	-.03
Importance of Religion	-.20**	-.20**	-.11**	-.19**	-.23**
Frequency of Religious Activities	.02	-.06	.06	-.07	-.09**
Frequency of Religious Service	-.06	-.12**	-.02	-.11**	-.15**
Aggregate Religious Commitment Scale	-.10**	-.16**	-.03	-.15**	-.19**
Frequency of After School Activities	-.07*	-.14**	-.07	-.16**	-.15**
Frequency of Stealing	1	.36**	.39**	.26**	.33**
Frequency of Skipping School	.36**	1	.35**	.41**	.46**
Frequency of Property Damage/Graffiti	.39**	.35**	1	.19**	.26**
Frequency of Tobacco Use	.26**	.41**	.19**	1	.56**
Frequency of Marijuana Use	.33**	.46**	.26**	.56**	1
Frequency of Illegal Drug Use	.23**	.35**	.21**	.39**	.59**
Frequency of Alcohol Use	.28**	.39**	.24**	.42**	.53**
Risky Sexual Behavior	.23**	.37**	.18**	.35**	.40**
Aggregate Delinquency Scale	.55**	.70**	.47**	.70**	.78**
Aggregate Delinquency Scale without Sexual Behavior	.58**	.72**	.50**	.73**	.80**
Age	-.08*	.07	-.01	.08*	.06
Gender	-.08*	.00	-.12**	.02	.00
Time Without Adult Supervision	.05	.15**	.01	.14**	.11**
Average Parental Education	-.06	-.14**	.00	-.09*	-.09*
Usual Grades in School	.23**	.37**	.20**	.18**	.20**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.4*Pearson Correlations of Main Variables (continued)*

	Frequency of Illegal Drug Use	Frequency of Alcohol Use	Risky Sexual Behavior	Aggregate Delinquency Scale	Aggregate Delinquency Scale without Sexual Behavior
Absolute Risk (None > Some)	-.04	-.02	-.11**	-.11**	-.09*
Relative Risk (Less > More)	.02	.06	.08*	.05	.04
Risk Assessment for Sexual Protection	.05	.00	-.07*	-.04	-.02
Social Desirability Scale Composite Score	-.08*	-.15**	-.11**	-.19**	-.20**
Index of Peer Relations Composite Score	.00	.07	-.06	-.05	-.03
Importance of Religion	-.15**	-.20**	-.13**	-.27**	-.28**
Frequency of Religious Activities	-.08*	-.06	-.06	-.07*	-.07
Frequency of Religious Service	-.09**	-.11**	-.11**	-.15**	-.15**
Aggregate Religious Commitment Scale	-.13**	-.15**	-.12**	-.20**	-.20**
Frequency of After School Activities	-.14**	-.07*	-.08*	-.17**	-.17**
Frequency of Stealing	.23**	.28**	.23**	.55**	.58**
Frequency of Skipping School	.35**	.39**	.37**	.70**	.72**
Frequency of Property Damage/Graffiti	.21**	.24**	.18**	.47**	.50**
Frequency of Tobacco Use	.39**	.42**	.35**	.70**	.73**
Frequency of Marijuana Use	.52**	.53**	.40**	.78**	.80**
Frequency of Illegal Drug Use	1	.34**	.20**	.55**	.60**
Frequency of Alcohol Use	.34**	1	.42**	.71**	.72**
Risky Sexual Behavior	.20**	.42**	1	.70**	.48**
Aggregate Delinquency Scale	.55**	.71**	.70**	1	.96**
Aggregate Delinquency Scale without Sexual Behavior	.60**	.72**	.48**	.96**	1
Age	.02	.11**	.20**	.11**	.06
Gender	.03	.08*	.00	-.00	.00
Time Without Adult Supervision	.05	.15**	.20**	.19**	.16**
Average Parental Education	-.11**	-.02	-.15**	-.14**	-.11**
Usual Grades in School	.16**	.12**	.23**	.32**	.31**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.5*Pearson Correlations of Main Variables (continued)*

	Age	Gender	Time Without Adult Supervision	Average Parental Education	Usual Grades in School
Absolute Risk (None > Some)	.01	.04	.00	.07	-.16**
Relative Risk (Less > More)	.01	-.06	.00	.03	-.04
Risk Assessment for Sexual Protection	-.04	.06	.00	.14**	-.10**
Social Desirability Scale Composite Score	.15**	-.01	-.03	-.09*	-.05
Index of Peer Relations Composite Score	-.02	.15**	.06	.11**	-.24**
Importance of Religion	.03	.11**	-.04	.04	-.11**
Frequency of Religious Activities	-.04	.07*	.03	.17**	-.10**
Frequency of Religious Service	-.03	.09*	.01	.14**	-.13**
Aggregate Religious Commitment Scale	-.01	.11**	.00	.14**	-.14**
Frequency of After School Activities	-.03	.04	.03	.14**	-.29**
Frequency of Stealing	-.08*	-.08*	.05	-.06	.23**
Frequency of Skipping School	.07	.00	.15**	-.14**	.37**
Frequency of Property Damage/Graffiti	-.01	-.12**	.01	.00	.20**
Frequency of Tobacco Use	.08*	.02	.14**	-.09*	.18**
Frequency of Marijuana Use	.06	.00	.11**	-.09*	.20**
Frequency of Illegal Drug Use	.02	.03	.05	-.11**	.16**
Frequency of Alcohol Use	.11**	.08*	.15**	-.02	.12**
Risky Sexual Behavior	.20**	.00	.20**	-.15**	.23**
Aggregate Delinquency Scale	.11**	-.00	.19**	-.14**	.32**
Aggregate Delinquency Scale without Sexual Behavior	.06	.00	.16**	-.11**	.31**
Age	1	.04	.12**	-.04	.00
Gender	.04	1	-.03	-.02	-.09*
Time Without Adult Supervision	.12**	-.03	1	.00	.09*
Average Parental Education	-.04	-.02	.00	1	-.21**
Usual Grades in School	.00	-.09*	.09*	-.21**	1

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.6*Spearman Correlations of Main Variables*

	Absolute Risk (None > Some)	Relative Risk (Less > More)	Risk Assessment for Sexual Protection	Social Desirability Scale Composite Score	Index of Peer Relations Composite Score
Absolute Risk (None > Some)	1	.25**	.06	-.07	.14**
Relative Risk (Less > More)	.25**	1	-.06	-.09*	.03
Risk Assessment for Sexual Protection	.06	-.06	1	-.07	.14**
Social Desirability Scale Composite Score	-.07	-.09*	-.07	1	.11**
Index of Peer Relations Composite Score	.14**	.03	.14**	.11**	1
Importance of Religion	.11**	-.08*	.00	.06	.17**
Frequency of Religious Activities	.09**	-.01	.01	-.01	.14**
Frequency of Religious Service	.15**	.00	.04	-.01	.17**
Aggregate Religious Commitment Scale	.14**	-.04	.02	.01	.18**
Frequency of After School Activities	.08*	-.04	.04	.08*	.17**
Frequency of Stealing	-.06	.04	-.02	-.21**	-.10**
Frequency of Skipping School	-.10**	.00	-.07*	-.07*	-.09**
Frequency of Property Damage/Graffiti	-.01	.00	.03	-.17**	-.09*
Frequency of Tobacco Use	-.05	.07*	.01	-.12**	-.03
Frequency of Marijuana Use	-.06	.02	.01	-.13**	-.04
Frequency of Illegal Drug Use	-.04	.02	.04	-.05	.02
Frequency of Alcohol Use	-.01	.08*	.00	-.16**	.06
Risky Sexual Behavior	-.11**	.08*	-.07*	-.11**	-.06
Aggregate Delinquency Scale	-.10**	.08*	-.03	-.20**	-.07
Aggregate Delinquency Scale without Sexual Behavior	-.08*	.06	-.02	-.22**	-.07
Age	.02	.01	-.04	.15**	.01
Gender	.04	-.06	.06	-.01	.17**
Time Without Adult Supervision	-.01	.00	.00	-.02	.04
Average Parental Education	.06	.03	.14**	-.08*	.12**
Usual Grades in School	-.14**	-.01	-.11**	-.02	-.26**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.7*Spearman Correlations of Main Variables (continued)*

	Importance of Religion	Frequency of Religious Activities	Frequency of Religious Service	Aggregate Religious Commitment Scale	Frequency of After School Activities
Absolute Risk (None > Some)	.11**	.09**	.15**	.14**	.08*
Relative Risk (Less > More)	-.08*	-.01	.00	-.04	-.04
Risk Assessment for Sexual Protection	.00	.01	.04	.02	.04
Social Desirability Scale Composite Score	.06	-.01	-.01	.01	.08*
Index of Peer Relations Composite Score	.17**	.14**	.17**	.18**	.17**
Importance of Religion	1	.43**	.52**	.78**	.13**
Frequency of Religious Activities	.43**	1	.63**	.83**	.16**
Frequency of Religious Service	.52**	.63**	1	.87**	.19**
Aggregate Religious Commitment Scale	.78**	.83**	.87**	1	.19**
Frequency of After School Activities	.13**	.16**	.19**	.19**	1
Frequency of Stealing	-.19**	.03	-.06	-.09**	-.07
Frequency of Skipping School	-.19**	-.06	-.10**	-.15**	-.11**
Frequency of Property Damage/Graffiti	-.11**	.01	-.03	-.05	-.05
Frequency of Tobacco Use	-.18**	-.03	-.08*	-.12**	-.13**
Frequency of Marijuana Use	-.20**	-.04	-.10**	-.14**	-.15**
Frequency of Illegal Drug Use	-.14**	-.02	-.07	-.09**	-.13**
Frequency of Alcohol Use	-.21**	-.05	-.10**	-.15**	-.06
Risky Sexual Behavior	-.14**	-.05	-.11**	-.13**	-.08*
Aggregate Delinquency Scale	-.26**	-.04	-.13**	-.18**	-.13**
Aggregate Delinquency Scale without Sexual Behavior	-.27**	-.03	-.13**	-.17**	-.13**
Age	.04	-.04	-.03	-.01	-.03
Gender	.11**	.08*	.09**	.11**	.04
Time Without Adult Supervision	-.05	.03	.00	-.01	.04
Average Parental Education	.05	.16**	.13**	.15**	.13**
Usual Grades in School	-.11**	-.09**	-.14**	-.14**	-.27**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.8*Spearman Correlations of Main Variables (continued)*

	Frequency of Stealing	Frequency of Skipping School	Frequency of Property Damage/Graffiti	Frequency of Tobacco Use	Frequency of Marijuana Use
Absolute Risk (None > Some)	-.06	-.10**	-.01	-.05	-.06
Relative Risk (Less > More)	.04	.00	.00	.07*	.02
Risk Assessment for Sexual Protection	-.02	-.07*	.03	.01	.01
Social Desirability Scale Composite Score	-.21**	-.07*	-.17**	-.12**	-.13**
Index of Peer Relations Composite Score	-.10**	-.09**	-.09*	-.03	-.04
Importance of Religion	-.19**	-.19**	-.11**	-.18**	-.20**
Frequency of Religious Activities	.03	-.06	.01	-.03	-.04
Frequency of Religious Service	-.06	-.10**	-.03	-.08*	-.10**
Aggregate Religious Commitment Scale	-.09**	-.15**	-.05	-.12**	-.14**
Frequency of After School Activities	-.07	-.11**	-.05	-.13**	-.15**
Frequency of Stealing	1	.36**	.35**	.31**	.38**
Frequency of Skipping School	.36**	1	.34**	.37**	.41**
Frequency of Property Damage/Graffiti	.35**	.34**	1	.25**	.30**
Frequency of Tobacco Use	.31**	.37**	.25**	1	.58**
Frequency of Marijuana Use	.38**	.41**	.30**	.58**	1
Frequency of Illegal Drug Use	.22**	.30**	.21**	.39**	.47**
Frequency of Alcohol Use	.31**	.36**	.26**	.43**	.51**
Risky Sexual Behavior	.25**	.37**	.21**	.35**	.44**
Aggregate Delinquency Scale	.56**	.63**	.45**	.61**	.70**
Aggregate Delinquency Scale without Sexual Behavior	.65**	.66**	.48**	.64**	.72**
Age	-.09*	.07*	-.03	.06	.06
Gender	-.09*	.00	-.12**	.02	-.01
Time Without Adult Supervision	.05	.14**	.03	.13**	.13**
Average Parental Education	-.10**	-.14**	.02	-.09*	-.11**
Usual Grades in School	.24**	.32**	.19**	.21**	.20**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.9*Spearman Correlations of Main Variables (continued)*

	Frequency of Illegal Drug Use	Frequency of Alcohol Use	Risky Sexual Behavior	Aggregate Delinquency Scale	Aggregate Delinquency Scale without Sexual Behavior
Absolute Risk (None > Some)	-.04	-.01	-.11**	-.10**	-.08*
Relative Risk (Less > More)	.02	.08*	.08*	.08*	.06
Risk Assessment for Sexual Protection	.04	.00	-.07*	-.03	-.02
Social Desirability Scale Composite Score	-.05	-.16**	-.11**	-.20**	-.22**
Index of Peer Relations Composite Score	.02	.06	-.06	-.07	-.07
Importance of Religion	-.14**	-.21**	-.14**	-.26**	-.27**
Frequency of Religious Activities	-.02	-.05	-.05	-.04	-.03
Frequency of Religious Service	-.07	-.10**	-.11**	-.13**	-.13**
Aggregate Religious Commitment Scale	-.09**	-.15**	-.13**	-.18**	-.17**
Frequency of After School Activities	-.13**	-.06	-.08*	-.13**	-.13**
Frequency of Stealing	.22**	.31**	.25**	.56**	.65**
Frequency of Skipping School	.30**	.36**	.37**	.63**	.66**
Frequency of Property Damage/Graffiti	.21**	.26**	.21**	.45**	.48**
Frequency of Tobacco Use	.39**	.43**	.35**	.61**	.64**
Frequency of Marijuana Use	.47**	.51**	.44**	.70**	.72**
Frequency of Illegal Drug Use	1	.31**	.25**	.41**	.42**
Frequency of Alcohol Use	.31**	1	.42**	.70**	.76**
Risky Sexual Behavior	.25**	.42**	1	.80**	.53**
Aggregate Delinquency Scale	.41**	.70**	.80**	1	.92**
Aggregate Delinquency Scale without Sexual Behavior	.42**	.76**	.53**	.92**	1
Age	.04	.10**	.20**	.13**	.07*
Gender	.06	.088*	.00	-.02	-.02
Time Without Adult Supervision	.06	.15**	.20**	.21**	.17**
Average Parental Education	-.11**	-.02	-.16**	-.15**	-.12**
Usual Grades in School	.13**	.13**	.23**	.31**	.30**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.10*Spearman Correlations of Main Variables (continued)*

	Age	Gender	Time Without Adult Supervision	Average Parental Education	Usual Grades in School
Absolute Risk (None > Some)	.02	.04	-.01	.06	-.14**
Relative Risk (Less > More)	.01	-.06	.00	.03	-.01
Risk Assessment for Sexual Protection	-.04	.06	.00	.14**	-.11**
Social Desirability Scale Composite Score	.15**	-.01	-.02	-.08*	-.02
Index of Peer Relations Composite Score	.01	.17**	.04	.12**	-.26**
Importance of Religion	.04	.11**	-.05	.05	-.11**
Frequency of Religious Activities	-.04	.08*	.03	.16**	-.09**
Frequency of Religious Service	-.03	.09**	.00	.13**	-.14**
Aggregate Religious Commitment Scale	-.01	.11**	-.01	.15**	-.14**
Frequency of After School Activities	-.03	.04	.04	.13**	-.27**
Frequency of Stealing	-.09*	-.09*	.05	-.10**	.24**
Frequency of Skipping School	.07*	.00	.14**	-.14**	.32**
Frequency of Property Damage/Graffiti	-.03	-.12**	.03	.02	.19**
Frequency of Tobacco Use	.06	.02	.13**	-.09*	.21**
Frequency of Marijuana Use	.06	-.01	.13**	-.11**	.20**
Frequency of Illegal Drug Use	.04	.06	.06	-.11**	.13**
Frequency of Alcohol Use	.10**	.08*	.15**	-.02	.13**
Risky Sexual Behavior	.20**	.00	.20**	-.16**	.23**
Aggregate Delinquency Scale	.13**	-.02	.21**	-.15**	.31**
Aggregate Delinquency Scale without Sexual Behavior	.07*	-.02	.17**	-.12**	.30**
Age	1	.04	.12**	-.03	.02
Gender	.04	1	-.03	-.02	-.09*
Time Without Adult Supervision	.12**	-.03	1	-.02	.10**
Average Parental Education	-.03	-.02	-.02	1	-.21**
Usual Grades in School	.02	-.09*	.10**	-.21**	1

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.11*Pearson Correlations of Main Variables (Without Texas/New York Participants >17 Years)*

	Absolute Risk (None > Some)	Relative Risk (Less > More)	Risk Assessment for Sexual Protection	Social Desirability Scale Composite Score	Index of Peer Relations Composite Score
Absolute Risk (None > Some)	1	.25**	.04	-.05	.12**
Relative Risk (Less > More)	.25**	1	-.07	-.09*	.04
Risk Assessment for Sexual Protection	.04	-.07	1	-.07	.09*
Social Desirability Scale Composite Score	-.05	-.09*	-.07	1	.10*
Index of Peer Relations Composite Score	.12**	.04	.09*	.10*	1
Importance of Religion	.09*	-.07	.01	.06	.17**
Frequency of Religious Activities	.12**	-.01	.03	-.03	.11**
Frequency of Religious Service	.16**	.00	.07	-.02	.16**
Aggregate Religious Commitment Scale	.15**	-.03	.04	.01	.18**
Frequency of After School Activities	.07	-.07	.04	.05	.17**
Frequency of Stealing	-.02	.04	.00	-.21**	-.06
Frequency of Skipping School	-.08*	.00	-.09*	-.08*	-.05
Frequency of Property Damage/Graffiti	-.01	-.04	.00	-.16**	-.07
Frequency of Tobacco Use	-.07	.08*	.00	-.11**	-.06
Frequency of Marijuana Use	-.08*	.02	-.02	-.14**	-.04
Frequency of Illegal Drug Use	-.03	.01	.04	-.07	-.01
Frequency of Alcohol Use	-.03	.08*	.02	-.14**	.07
Risky Sexual Behavior	-.10**	.08*	-.07	-.10**	-.06
Aggregate Delinquency Scale	-.09*	.06	-.03	-.18**	-.05
Aggregate Delinquency Scale without Sexual Behavior	-.07	.05	-.01	-.18**	-.04
Age	.05	.00	.00	.14**	.00
Gender	.02	-.07	.04	.01	.16**
Time Without Adult Supervision	.04	.01	.00	-.05	.06
Average Parental Education	.08*	.05	.18**	-.09*	.11**
Usual Grades in School	-.15**	-.04	-.13**	-.05	-.23**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.12

Pearson Correlations of Main Variables (continued) (Without Texas/New York Participants >17 Years)

	Importance of Religion	Frequency of Religious Activities	Frequency of Religious Service	Aggregate Religious Commitment Scale	Frequency of After School Activities
Absolute Risk (None > Some)	.09*	.12**	.16**	.15**	.07
Relative Risk (Less > More)	-.07	-.01	.00	-.03	-.07
Risk Assessment for Sexual Protection	.01	.03	.07	.04	.04
Social Desirability Scale Composite Score	.06	-.03	-.02	.01	.05
Index of Peer Relations Composite Score	.17**	.11**	.16**	.18**	.17**
Importance of Religion	1	.43**	.53**	.80**	.14**
Frequency of Religious Activities	.43**	1	.62**	.82**	.15**
Frequency of Religious Service	.53**	.62**	1	.87**	.20**
Aggregate Religious Commitment Scale	.80**	.82**	.87**	1	.19**
Frequency of After School Activities	.14**	.15**	.20**	.19**	1
Frequency of Stealing	-.20**	.03	-.05	-.090*	-.05
Frequency of Skipping School	-.20**	-.06	-.11**	-.15**	-.13**
Frequency of Property Damage/Graffiti	-.13**	.04	-.02	-.05	-.08*
Frequency of Tobacco Use	-.21**	-.05	-.08*	-.13**	-.16**
Frequency of Marijuana Use	-.24**	-.10*	-.14**	-.19**	-.14**
Frequency of Illegal Drug Use	-.14**	-.09*	-.09*	-.13**	-.16**
Frequency of Alcohol Use	-.22**	-.06	-.10*	-.15**	-.06
Risky Sexual Behavior	-.14**	-.04	-.10*	-.11**	-.07
Aggregate Delinquency Scale	-.28**	-.07	-.13**	-.19**	-.15**
Aggregate Delinquency Scale without Sexual Behavior	-.29**	-.07	-.13**	-.20**	-.16**
Age	.02	-.02	-.03	-.01	-.01
Gender	.10**	.09*	.09*	.11**	.05
Time Without Adult Supervision	-.02	.03	.02	.01	.04
Average Parental Education	.06	.18**	.15**	.15**	.14**
Usual Grades in School	-.13**	-.11**	-.15**	-.16**	-.29**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.13

Pearson Correlations of Main Variables (continued) (Without Texas/New York Participants >17 Years)

	Frequency of Stealing	Frequency of Skipping School	Frequency of Property Damage/Graffiti	Frequency of Tobacco Use	Frequency of Marijuana Use
Absolute Risk (None > Some)	-.02	-.08*	-.01	-.07	-.08*
Relative Risk (Less > More)	.04	.00	-.04	.08*	.02
Risk Assessment for Sexual Protection	.00	-.09*	.00	.00	-.02
Social Desirability Scale Composite Score	-.21**	-.08*	-.16**	-.11**	-.14**
Index of Peer Relations Composite Score	-.06	-.05	-.07	-.06	-.04
Importance of Religion	-.20**	-.20**	-.13**	-.21**	-.24**
Frequency of Religious Activities	.03	-.06	.04	-.05	-.10*
Frequency of Religious Service	-.05	-.11**	-.02	-.08*	-.14**
Aggregate Religious Commitment Scale	-.09*	-.15**	-.05	-.13**	-.19**
Frequency of After School Activities	-.05	-.13**	-.08*	-.16**	-.14**
Frequency of Stealing	1	.40**	.42**	.31**	.37**
Frequency of Skipping School	.40**	1	.33**	.41**	.46**
Frequency of Property Damage/Graffiti	.42**	.33**	1	.23**	.31**
Frequency of Tobacco Use	.31**	.41**	.23**	1	.54**
Frequency of Marijuana Use	.37**	.46**	.31**	.54**	1
Frequency of Illegal Drug Use	.26**	.37**	.23**	.39**	.52**
Frequency of Alcohol Use	.34**	.40**	.27**	.40**	.54**
Risky Sexual Behavior	.27**	.37**	.20**	.33**	.41**
Aggregate Delinquency Scale	.60**	.70**	.50**	.69**	.78**
Aggregate Delinquency Scale without Sexual Behavior	.63**	.72**	.53**	.72**	.80**
Age	-.04	.06	.01	.03	.06
Gender	-.06	.01	-.12**	-.03	-.03
Time Without Adult Supervision	.07	.13**	.01	.12**	.10*
Average Parental Education	-.05	-.16**	-.01	-.09*	-.09*
Usual Grades in School	.24**	.37**	.21**	.21**	.21**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.14

Pearson Correlations of Main Variables (continued) (Without Texas/New York Participants >17 Years)

	Frequency of Illegal Drug Use	Frequency of Alcohol Use	Risky Sexual Behavior	Aggregate Delinquency Scale	Aggregate Delinquency Scale without Sexual Behavior
Absolute Risk (None > Some)	-.03	-.03	-.10 ^{**}	-.09 [*]	-.07
Relative Risk (Less > More)	.01	.08 [*]	.08 [*]	.06	.05
Risk Assessment for Sexual Protection	.04	.02	-.07	-.03	-.01
Social Desirability Scale Composite Score	-.07	-.14 ^{**}	-.10 ^{**}	-.18 ^{**}	-.18 ^{**}
Index of Peer Relations Composite Score	-.01	.07	-.06	-.05	-.04
Importance of Religion	-.14 ^{**}	-.22 ^{**}	-.14 ^{**}	-.28 ^{**}	-.29 ^{**}
Frequency of Religious Activities	-.09 [*]	-.06	-.04	-.07	-.07
Frequency of Religious Service	-.09 [*]	-.10 [*]	-.10 [*]	-.13 ^{**}	-.13 ^{**}
Aggregate Religious Commitment Scale	-.13 ^{**}	-.15 ^{**}	-.11 ^{**}	-.19 ^{**}	-.20 ^{**}
Frequency of After School Activities	-.16 ^{**}	-.06	-.07	-.15 ^{**}	-.16 ^{**}
Frequency of Stealing	.26 ^{**}	.34 ^{**}	.27 ^{**}	.60 ^{**}	.63 ^{**}
Frequency of Skipping School	.37 ^{**}	.40 ^{**}	.37 ^{**}	.70 ^{**}	.72 ^{**}
Frequency of Property Damage/Graffiti	.23 ^{**}	.27 ^{**}	.20 ^{**}	.50 ^{**}	.53 ^{**}
Frequency of Tobacco Use	.39 ^{**}	.40 ^{**}	.33 ^{**}	.69 ^{**}	.72 ^{**}
Frequency of Marijuana Use	.52 ^{**}	.54 ^{**}	.41 ^{**}	.78 ^{**}	.80 ^{**}
Frequency of Illegal Drug Use	1	.35 ^{**}	.20 ^{**}	.56 ^{**}	.61 ^{**}
Frequency of Alcohol Use	.35 ^{**}	1	.40 ^{**}	.71 ^{**}	.72 ^{**}
Risky Sexual Behavior	.20 ^{**}	.40 ^{**}	1	.70 ^{**}	.48 ^{**}
Aggregate Delinquency Scale	.56 ^{**}	.71 ^{**}	.70 ^{**}	1	.96 ^{**}
Aggregate Delinquency Scale without Sexual Behavior	.61 ^{**}	.72 ^{**}	.48 ^{**}	.96 ^{**}	1
Age	.03	.07	.14 ^{**}	.08 [*]	.05
Gender	.02	.06	-.03	-.03	-.03
Time Without Adult Supervision	.05	.14 ^{**}	.20 ^{**}	.17 ^{**}	.14 ^{**}
Average Parental Education	-.13 ^{**}	.00	-.15 ^{**}	-.14 ^{**}	-.11 ^{**}
Usual Grades in School	.18 ^{**}	.14 ^{**}	.23 ^{**}	.34 ^{**}	.32 ^{**}

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.15

Pearson Correlations of Main Variables (continued) (Without Texas/New York Participants >17 Years)

	Age	Gender	Time Without Adult Supervision	Average Parental Education	Usual Grades in School
Absolute Risk (None > Some)	.05	.02	.04	.08*	-.15**
Relative Risk (Less > More)	.00	-.07	.01	.05	-.04
Risk Assessment for Sexual Protection	.00	.04	.00	.12**	-.13**
Social Desirability Scale Composite Score	.14**	.01	-.05	-.09*	-.05
Index of Peer Relations Composite Score	.00	.16**	.06	.11**	-.23**
Importance of Religion	.02	.10**	-.02	.06	-.13**
Frequency of Religious Activities	-.02	.09*	.03	.18**	-.11**
Frequency of Religious Service	-.03	.09*	.02	.15**	-.15**
Aggregate Religious Commitment Scale	-.01	.11**	.01	.15**	-.16**
Frequency of After School Activities	-.01	.05	.04	.14**	-.29**
Frequency of Stealing	-.04	-.06	.07	-.05	.24**
Frequency of Skipping School	.06	.01	.13**	-.16**	.37**
Frequency of Property Damage/Graffiti	.01	-.12**	.01	-.01	.21**
Frequency of Tobacco Use	.03	-.03	.12**	-.09*	.21**
Frequency of Marijuana Use	.06	-.03	.10*	-.09*	.21**
Frequency of Illegal Drug Use	.03	.02	.05	-.13**	.18**
Frequency of Alcohol Use	.07	.06	.14**	.00	.14**
Risky Sexual Behavior	.14**	-.03	.19**	-.15**	.23**
Aggregate Delinquency Scale	.08*	-.03	.17**	-.14**	.34**
Aggregate Delinquency Scale without Sexual Behavior	.05	-.03	.14**	-.11**	.32**
Age	1	.02	.12**	.00	.02
Gender	.02	1	-.04	-.02	-.06
Time Without Adult Supervision	.12**	-.04	1	.00	.07
Average Parental Education	.00	-.02	.00	1	-.21**
Usual Grades in School	.02	-.06	.07	-.21**	1

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.16*Spearman Correlations of Main Variables (Without Texas/New York Participants >17 Years)*

	Absolute Risk (None > Some)	Relative Risk (Less > More)	Risk Assessment for Sexual Protection	Social Desirability Scale Composite Score	Index of Peer Relations Composite Score
Absolute Risk (None > Some)	1	.25**	.04	-.06	.13**
Relative Risk (Less > More)	.25**	1	-.07	-.09*	.03
Risk Assessment for Sexual Protection	.04	-.07	1	-.06	.11**
Social Desirability Scale Composite Score	-.06	-.09*	-.06	1	.11**
Index of Peer Relations Composite Score	.13**	.03	.11**	.11**	1
Importance of Religion	.10**	-.07	.02	.06	.18**
Frequency of Religious Activities	.11**	.00	.02	-.02	.13**
Frequency of Religious Service	.16**	.00	.07	-.02	.17**
Aggregate Religious Commitment Scale	.15**	-.03	.05	.00	.19**
Frequency of After School Activities	.06	-.06	.04	.05	.16**
Frequency of Stealing	-.05	.04	-.01	-.19**	-.11**
Frequency of Skipping School	-.08*	.02	-.06	-.06	-.11**
Frequency of Property Damage/Graffiti	.00	.00	.04	-.18**	-.09*
Frequency of Tobacco Use	-.05	.06	.02	-.09*	-.03
Frequency of Marijuana Use	-.07	.02	.00	-.13**	-.04
Frequency of Illegal Drug Use	-.03	.01	.03	-.05	.00
Frequency of Alcohol Use	-.03	.08*	.01	-.15**	.06
Risky Sexual Behavior	-.10**	.08*	-.06	-.09*	-.07
Aggregate Delinquency Scale	-.09*	.08*	-.02	-.18**	-.08*
Aggregate Delinquency Scale without Sexual Behavior	-.08*	.07	-.01	-.20**	-.07
Age	.04	-.01	.00	.14**	.01
Gender	.02	-.07	.04	.01	.17**
Time Without Adult Supervision	.03	.01	.00	-.04	.04
Average Parental Education	.07	.05	.12**	-.08	.14**
Usual Grades in School	-.14**	.00	-.13**	-.03	-.26**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.17

Spearman Correlations of Main Variables (continued) (Without Texas/New York Participants >17 Years)

	Importance of Religion	Frequency of Religious Activities	Frequency of Religious Service	Aggregate Religious Commitment Scale	Frequency of After School Activities
Absolute Risk (None > Some)	.10**	.11**	.16**	.15**	.06
Relative Risk (Less > More)	-.07	.00	.00	-.03	-.06
Risk Assessment for Sexual Protection	.02	.02	.07	.05	.04
Social Desirability Scale Composite Score	.06	-.02	-.02	.00	.05
Index of Peer Relations Composite Score	.18**	.13**	.17**	.19**	.16**
Importance of Religion	1	.45**	.54**	.79**	.14**
Frequency of Religious Activities	.45**	1	.63**	.83**	.16**
Frequency of Religious Service	.54**	.63**	1	.87**	.18**
Aggregate Religious Commitment Scale	.79**	.83**	.87**	1	.19**
Frequency of After School Activities	.14**	.16**	.18**	.19**	1
Frequency of Stealing	-.19**	.03	-.06	-.09*	-.04
Frequency of Skipping School	-.19**	-.06	-.09*	-.15**	-.10**
Frequency of Property Damage/Graffiti	-.14**	.01	-.02	-.06	-.07
Frequency of Tobacco Use	-.19**	-.02	-.05	-.11**	-.12**
Frequency of Marijuana Use	-.20**	-.04	-.08*	-.14**	-.14**
Frequency of Illegal Drug Use	-.13**	-.03	-.05	-.09*	-.14**
Frequency of Alcohol Use	-.21**	-.06	-.10*	-.15**	-.05
Risky Sexual Behavior	-.15**	-.03	-.09*	-.12**	-.06
Aggregate Delinquency Scale	-.26**	-.03	-.11**	-.17**	-.10**
Aggregate Delinquency Scale without Sexual Behavior	-.27**	-.03	-.10**	-.16**	-.11**
Age	.03	-.03	-.03	-.01	-.01
Gender	.11**	.10*	.10*	.11**	.04
Time Without Adult Supervision	-.02	.04	.01	.01	.05
Average Parental Education	.07	.17**	.15**	.16**	.13**
Usual Grades in School	-.12**	-.11**	-.16**	-.16**	-.28**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.18

Spearman Correlations of Main Variables (continued) (Without Texas/New York Participants >17 Years)

	Frequency of Stealing	Frequency of Skipping School	Frequency of Property Damage/Graffiti	Frequency of Tobacco Use	Frequency of Marijuana Use
Absolute Risk (None > Some)	-.05	-.08*	.00	-.05	-.07
Relative Risk (Less > More)	.04	.02	.00	.06	.02
Risk Assessment for Sexual Protection	-.01	-.06	.04	.02	.00
Social Desirability Scale Composite Score	-.19**	-.06	-.18**	-.09*	-.13**
Index of Peer Relations Composite Score	-.11**	-.11**	-.09*	-.03	-.04
Importance of Religion	-.19**	-.19**	-.14**	-.19**	-.20**
Frequency of Religious Activities	.03	-.06	.01	-.02	-.04
Frequency of Religious Service	-.06	-.09*	-.02	-.05	-.08*
Aggregate Religious Commitment Scale	-.09*	-.15**	-.06	-.11**	-.14**
Frequency of After School Activities	-.04	-.10**	-.07	-.12**	-.14**
Frequency of Stealing	1	.39**	.36**	.34**	.41**
Frequency of Skipping School	.39**	1	.34**	.37**	.42**
Frequency of Property Damage/Graffiti	.36**	.34**	1	.27**	.33**
Frequency of Tobacco Use	.34**	.37**	.27**	1	.56**
Frequency of Marijuana Use	.41**	.42**	.33**	.56**	1
Frequency of Illegal Drug Use	.25**	.31**	.22**	.37**	.46**
Frequency of Alcohol Use	.35**	.36**	.27**	.41**	.51**
Risky Sexual Behavior	.29**	.37**	.23**	.33**	.45**
Aggregate Delinquency Scale	.60**	.62**	.46**	.60**	.71**
Aggregate Delinquency Scale without Sexual Behavior	.68**	.66**	.49**	.63**	.72**
Age	-.04	.07	-.02	.04	.08*
Gender	-.07	.00	-.12**	-.03	-.04
Time Without Adult Supervision	.07	.12**	.04	.12**	.13**
Average Parental Education	-.10*	-.15**	.02	-.09*	-.12**
Usual Grades in School	.24**	.32**	.20**	.21**	.19**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.19

Spearman Correlations of Main Variables (continued) (Without Texas/New York Participants >17 Years)

	Frequency of Illegal Drug Use	Frequency of Alcohol Use	Risky Sexual Behavior	Aggregate Delinquency Scale	Aggregate Delinquency Scale without Sexual Behavior
Absolute Risk (None > Some)	-.03	-.03	-.10**	-.09*	-.08*
Relative Risk (Less > More)	.01	.08*	.08*	.08*	.07
Risk Assessment for Sexual Protection	.03	.01	-.06	-.02	-.01
Social Desirability Scale Composite Score	-.05	-.15**	-.09*	-.18**	-.20**
Index of Peer Relations Composite Score	.00	.06	-.07	-.08*	-.07
Importance of Religion	-.13**	-.21**	-.15**	-.26**	-.27**
Frequency of Religious Activities	-.03	-.06	-.03	-.03	-.03
Frequency of Religious Service	-.05	-.10*	-.09*	-.11**	-.10**
Aggregate Religious Commitment Scale	-.09*	-.15**	-.12**	-.17**	-.16**
Frequency of After School Activities	-.14**	-.05	-.06	-.10**	-.11**
Frequency of Stealing	.25**	.35**	.29**	.60**	.68**
Frequency of Skipping School	.31**	.36**	.37**	.62**	.66**
Frequency of Property Damage/Graffiti	.22**	.27**	.23**	.46**	.49**
Frequency of Tobacco Use	.37**	.41**	.33**	.60**	.63**
Frequency of Marijuana Use	.46**	.51**	.45**	.71**	.72**
Frequency of Illegal Drug Use	1	.31**	.25**	.41**	.42**
Frequency of Alcohol Use	.31**	1	.41**	.70**	.75**
Risky Sexual Behavior	.25**	.41**	1	.79**	.52**
Aggregate Delinquency Scale	.41**	.70**	.79**	1	.92**
Aggregate Delinquency Scale without Sexual Behavior	.42**	.75**	.52**	.92**	1
Age	.04	.07	.14**	.10*	.06
Gender	.04	.05	-.03	-.05	-.04
Time Without Adult Supervision	.07	.14**	.20**	.20**	.16**
Average Parental Education	-.12**	.00	-.15**	-.14**	-.11**
Usual Grades in School	.15**	.15**	.23**	.32**	.31**

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.20

Spearman Correlations of Main Variables (continued) (Without Texas/New York Participants >17 Years)

	Age	Gender	Time Without Adult Supervision	Average Parental Education	Usual Grades in School
Absolute Risk (None > Some)	.04	.02	.03	.07	-.14**
Relative Risk (Less > More)	-.01	-.07	.01	.05	.00
Risk Assessment for Sexual Protection	.00	.04	.00	.12**	-.13**
Social Desirability Scale Composite Score	.14**	.01	-.04	-.08	-.03
Index of Peer Relations Composite Score	.01	.17**	.04	.14**	-.26**
Importance of Religion	.03	.11**	-.02	.07	-.12**
Frequency of Religious Activities	-.03	.10*	.04	.17**	-.11**
Frequency of Religious Service	-.03	.10*	.01	.15**	-.16**
Aggregate Religious Commitment Scale	-.01	.11**	.01	.16**	-.16**
Frequency of After School Activities	-.01	.04	.05	.13**	-.28**
Frequency of Stealing	-.04	-.07	.07	-.10*	.24**
Frequency of Skipping School	.07	.00	.12**	-.15**	.32**
Frequency of Property Damage/Graffiti	-.02	-.12**	.04	.02	.20**
Frequency of Tobacco Use	.04	-.03	.12**	-.09*	.21**
Frequency of Marijuana Use	.08*	-.04	.13**	-.12**	.19**
Frequency of Illegal Drug Use	.04	.04	.07	-.12**	.15**
Frequency of Alcohol Use	.07	.05	.14**	.00	.15**
Risky Sexual Behavior	.14**	-.03	.20**	-.15**	.23**
Aggregate Delinquency Scale	.10*	-.05	.20**	-.14**	.32**
Aggregate Delinquency Scale without Sexual Behavior	.06	-.04	.16**	-.11**	.31**
Age	1	.02	.13**	.01	.04
Gender	.02	1	-.04	-.02	-.07
Time Without Adult Supervision	.13**	-.04	1	-.02	.08*
Average Parental Education	.01	-.02	-.02	1	-.21**
Usual Grades in School	.04	-.07	.08*	-.21**	1

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.21*Pearson Correlations of Variables Included in Regressions*

	Absolute Risk (None > Some)	Relative Risk (Less > More)	Aggregate Religious Commitment	Aggregate Delinquency Scale	Aggregate Delinquency Scale without Sexual Behavior
Absolute Risk (None > Some)	1	.25**	.14**	-.11**	-.09*
Relative Risk (Less > More)	.25**	1	-.04	.05	.04
Aggregate Religious Commitment	.14**	-.04	1	-.20**	-.20**
Aggregate Delinquency Scale	-.11**	.05	-.20**	1	.96**
Aggregate Delinquency Scale without Sexual Behavior	-.09*	.04	-.20**	.96**	1
Frequency of After School Activities	.09**	-.04	.19**	-.17**	-.17**
Age	.01	.01	-.01	.11**	.06
Gender	.04	-.06	.11**	-.00	-.00
Ethnicity: African-American	.00	-.02	.19**	-.06	-.12**
Ethnicity: Hispanic	-.03	-.03	-.04	.03	.06
Living Situation: Both Parents	.07*	-.02	.08*	-.18**	-.13**
Living Situation: Single Parent	-.08*	.00	-.06	.13**	.09*
Time Without Adult Supervision	-.00	.00	.00	.19**	.16**
Usual Grades in School	-.16**	-.04	-.14**	.32**	.31**
Religious Affiliation: Catholic	.03	-.00	-.04	-.02	.01
Religious Affiliation: Protestant	.06	-.05	.22**	-.03	-.05
Religious Affiliation: Born- Again Christian	-.02	.01	.19**	-.05	-.08*
Religious Affiliation: Other	.02	.04	.05	.02	.02
Index of Peer Relations Composite Score	.13**	.04	.17**	-.05	-.03

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.22*Pearson Correlations of Variables Included in Regressions (continued)*

	Frequency of After School Activities	Age	Gender	Ethnicity: African-American	Ethnicity: Hispanic
Absolute Risk (None > Some)	.09**	.01	.04	.00	-.03
Relative Risk (Less > More)	-.04	.01	-.06	-.02	-.03
Aggregate Religious Commitment	.19**	-.01	.11**	.19**	-.04
Aggregate Delinquency Scale	-.17**	.11**	-.00	-.06	.03
Aggregate Delinquency Scale without Sexual Behavior	-.17**	.06	-.00	-.12**	.06
Frequency of After School Activities	1	-.03	.04	.07	-.07*
Age	-.03	1	.04	-.01	-.02
Gender	.04	.04	1	.08*	.01
Ethnicity: African-American	.07	-.01	.08*	1	-.27**
Ethnicity: Hispanic	-.07*	-.02	.01	-.27**	1
Living Situation: Both Parents	.01	.01	-.07*	-.25**	.10**
Living Situation: Single Parent	.05	-.02	-.04	.27**	-.10**
Time Without Adult Supervision	.03	.12**	-.03	.10**	-.07
Usual Grades in School	-.29**	.00	-.09*	.00	.13**
Religious Affiliation: Catholic	-.02	-.02	.02	-.29**	.50**
Religious Affiliation: Protestant	.06	.07*	-.02	.14**	-.23**
Religious Affiliation: Born-Again Christian	.05	-.10**	.03	.28**	-.09*
Religious Affiliation: Other	-.01	.04	-.04	-.08*	-.09*
Index of Peer Relations Composite Score	.18**	-.02	.15**	-.04	-.00

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.23*Pearson Correlations of Variables Included in Regressions (continued)*

	Living Situation: Both Parents	Living Situation: Single Parent	Time Without Adult Supervision	Usual Grades in School	Religious Affiliation: Catholic
Absolute Risk (None > Some)	.07*	-.08*	-.00	-.16**	.03
Relative Risk (Less > More)	-.02	.00	.00	-.04	-.00
Aggregate Religious Commitment	.08*	-.06	.00	-.14**	-.04
Aggregate Delinquency Scale	-.18**	.13**	.19**	.32**	-.02
Aggregate Delinquency Scale without Sexual Behavior	-.13**	.09*	.16**	.31**	.01
Frequency of After School Activities	.01	.05	.03	-.29**	-.02
Age	.01	-.02	.12**	.00	-.02
Gender	-.07*	-.04	-.03	-.09*	.02
Ethnicity: African-American	-.25**	.27**	.10**	.00	-.29**
Ethnicity: Hispanic	.10**	-.10**	-.07	.13**	.50**
Living Situation: Both Parents	1	-.57**	-.19**	-.14**	.13**
Living Situation: Single Parent	-.57**	1	.13**	.04	-.12**
Time Without Adult Supervision	-.19**	.13**	1	.09*	-.09**
Usual Grades in School	-.14**	.04	.09*	1	.05
Religious Affiliation: Catholic	.13**	-.12**	-.09**	.05	1
Religious Affiliation: Protestant	.01	.02	.01	-.09*	-.35**
Religious Affiliation: Born-Again Christian	-.11**	.11**	.09*	.04	-.27**
Religious Affiliation: Other	.02	-.02	-.02	-.07*	-.21**
Index of Peer Relations Composite Score	.02	-.08*	.06	-.24**	.02

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.24*Pearson Correlations of Variables Included in Regressions (continued)*

	Religious Affiliation: Protestant	Religious Affiliation: Born-Again Christian	Religious Affiliation: Other	Index of Peer Relations Composite Score
Absolute Risk (None > Some)	.06	-.02	.02	.13**
Relative Risk (Less > More)	-.05	.01	.04	.04
Aggregate Religious Commitment	.22**	.19**	.05	.17**
Aggregate Delinquency Scale	-.03	-.05	.02	-.05
Aggregate Delinquency Scale without Sexual Behavior	-.05	-.08*	.02	-.03
Frequency of After School Activities	.06	.05	-.02	.18**
Age	.07*	-.10**	.04	-.02
Gender	-.02	.03	-.04	.15**
Ethnicity: African-American	.14**	.28**	-.08*	-.04
Ethnicity: Hispanic	-.23**	-.09*	-.09*	-.00
Living Situation: Both Parents	.01	-.11**	.02	.02
Living Situation: Single Parent	.02	.11**	-.02	-.08*
Time Without Adult Supervision	.01	.09*	-.02	.06
Usual Grades in School	-.09*	.04	-.07*	-.24**
Religious Affiliation: Catholic	-.35**	-.27**	-.21**	.02
Religious Affiliation: Protestant	1	-.31**	-.25**	.09*
Religious Affiliation: Born-Again Christian	-.31**	1	-.19**	-.03
Religious Affiliation: Other	-.25**	-.19**	1	.01
Index of Peer Relations Composite Score	.09*	-.03	.01	1

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.25*Spearman Correlations of Variables Included in Regressions*

	Absolute Risk (None > Some)	Relative Risk (Less > More)	Aggregate Religious Commitment	Aggregate Delinquency Scale	Aggregate Delinquency Scale without Sexual Behavior
Absolute Risk (None > Some)	1	.25**	.14**	-.10**	-.08*
Relative Risk (Less > More)	.25**	1	-.04	.08*	.07
Aggregate Religious Commitment	.14**	-.04	1	-.18**	-.17**
Aggregate Delinquency Scale	-.10**	.08*	-.18**	1	.92**
Aggregate Delinquency Scale without Sexual Behavior	-.08*	.07	-.17**	.92**	1
Frequency of After School Activities	.08*	-.04	.19**	-.13**	-.13**
Age	.02	.01	-.02	.13**	.07*
Gender	.04	-.06	.11**	-.02	-.02
Ethnicity: African-American	.00	-.02	.19**	-.02	-.09**
Ethnicity: Hispanic	-.03	-.03	-.04	.01	.05
Living Situation: Both Parents	.07*	-.02	.09*	-.19**	-.13**
Living Situation: Single Parent	-.08*	.00	-.07	.13**	.09*
Time Without Adult Supervision	-.01	-.00	-.01	.21**	.17**
Usual Grades in School	-.14**	-.01	-.14**	.31**	.30**
Religious Affiliation: Catholic	.03	-.00	-.05	-.03	.02
Religious Affiliation: Protestant	.06	-.05	.21**	-.01	-.03
Religious Affiliation: Born-Again Christian	-.02	.01	.19**	-.02	-.07
Religious Affiliation: Other	.02	.04	.05	.01	.02
Index of Peer Relations Composite Score	.14**	.03	.18**	-.07	-.07

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.26*Pearson Correlations of Variables Included in Regressions (continued)*

	Frequency of After School Activities	Age	Gender	Ethnicity: African-American	Ethnicity: Hispanic
Absolute Risk (None > Some)	.08*	.02	.04	.00	-.03
Relative Risk (Less > More)	-.04	.01	-.06	-.02	-.03
Aggregate Religious Commitment	.19**	-.02	.11**	.19**	-.04
Aggregate Delinquency Scale	-.13**	.13**	-.02	-.02	.01
Aggregate Delinquency Scale without Sexual Behavior	-.13**	.07*	-.02	-.09**	.05
Frequency of After School Activities	1	-.03	.04	.07*	-.07*
Age	-.03	1	.04	-.01	-.02
Gender	.04	.04	1	.08*	.01
Ethnicity: African-American	.07*	-.01	.08*	1	-.27**
Ethnicity: Hispanic	-.07*	-.02	.01	-.27**	1
Living Situation: Both Parents	-.00	.01	-.07*	-.25**	.10**
Living Situation: Single Parent	.06	-.02	-.04	.27**	-.10**
Time Without Adult Supervision	.04	.12**	-.03	.10**	-.06
Usual Grades in School	-.27**	.02	-.09*	.01	.14**
Religious Affiliation: Catholic	-.02	-.02	.02	-.29**	.50**
Religious Affiliation: Protestant	.06	.07	-.02	.14**	-.23**
Religious Affiliation: Born-Again Christian	.06	-.10**	.03	.28**	-.09*
Religious Affiliation: Other	-.01	.04	-.04	-.08*	-.09*
Index of Peer Relations Composite Score	.17**	.01	.17**	-.05	-.02

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.27*Pearson Correlations of Variables Included in Regressions (continued)*

	Living Situation: Both Parents	Living Situation: Single Parent	Time Without Adult Supervision	Usual Grades in School	Religious Affiliation: Catholic
Absolute Risk (None > Some)	.07*	-.08*	-.01	-.14**	.03
Relative Risk (Less > More)	-.02	.00	-.00	-.01	-.00
Aggregate Religious Commitment	.09*	-.07	-.01	-.14**	-.05
Aggregate Delinquency Scale	-.19**	.13**	.21**	.31**	-.03
Aggregate Delinquency Scale without Sexual Behavior	-.13**	.09*	.17**	.30**	.02
Frequency of After School Activities	-.00	.06	.04	-.27**	-.02
Age	.01	-.02	.12**	.02	-.02
Gender	-.07*	-.04	-.03	-.09*	.02
Ethnicity: African-American	-.25**	.27**	.10**	.01	-.29**
Ethnicity: Hispanic	.10**	-.10**	-.06	.14**	.50**
Living Situation: Both Parents	1	-.57**	-.19**	-.15**	.13**
Living Situation: Single Parent	-.57**	1	.12**	.06	-.12**
Time Without Adult Supervision	-.19**	.12**	1	.10**	-.09*
Usual Grades in School	-.15**	.06	.10**	1	.05
Religious Affiliation: Catholic	.13**	-.12**	-.09*	.05	1
Religious Affiliation: Protestant	.01	.02	.00	-.09**	-.35**
Religious Affiliation: Born-Again Christian	-.11**	.11**	.09**	.05	-.27**
Religious Affiliation: Other	.02	-.02	-.03	-.07*	-.21**
Index of Peer Relations Composite Score	.05	-.09**	.04	-.26**	.02

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table D.28*Pearson Correlations of Variables Included in Regressions (continued)*

	Religious Affiliation: Protestant	Religious Affiliation: Born- Again Christian	Religious Affiliation: Other	Index of Peer Relations Composite Score
Absolute Risk (None > Some)	.06	-.02	.02	.14**
Relative Risk (Less > More)	-.05	.01	.04	.03
Aggregate Religious Commitment	.21**	.19**	.05	.18**
Aggregate Delinquency Scale	-.01	-.02	.01	-.07
Aggregate Delinquency Scale without Sexual Behavior	-.03	-.07	.02	-.07
Frequency of After School Activities	.06	.06	-.01	.17**
Age	.07	-.10**	.04	.01
Gender	-.02	.03	-.04	.17**
Ethnicity: African- American	.14**	.28**	-.08*	-.05
Ethnicity: Hispanic	-.23**	-.09*	-.09*	-.02
Living Situation: Both Parents	.01	-.11**	.02	.05
Living Situation: Single Parent	.02	.11**	-.02	-.09**
Time Without Adult Supervision	.00	.09**	-.03	.04
Usual Grades in School	-.09**	.05	-.07*	-.26**
Religious Affiliation: Catholic	-.35**	-.27**	-.21**	.02
Religious Affiliation: Protestant	1	-.31**	-.25**	.10**
Religious Affiliation: Born-Again Christian	-.31**	1	-.19**	-.05
Religious Affiliation: Other	-.25**	-.19**	1	.03
Index of Peer Relations Composite Score	.10**	-.05	.03	1

Notes: **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

APPENDIX E

Chi-Squared

Table E.1

Relative Risk Statement (Less>More) and Absolute Risk Statement (None>Some)

		Absolute Risk (None > Some)		Total
		No	Yes	
Relative Risk (Less > More)	No	Count 143	Count 254	Count 397
	Yes	% within Relative Risk (Less > More) 36.0%	% within Relative Risk (Less > More) 64.0%	% within Relative Risk (Less > More) 100.0%
Total	No	Count 59	Count 351	Count 410
	Yes	% within Relative Risk (Less > More) 14.4%	% within Relative Risk (Less > More) 85.6%	% within Relative Risk (Less > More) 100.0%
Total		Count 202	Count 605	Count 807
		% within Relative Risk (Less > More) 25.0%	% within Relative Risk (Less > More) 75.0%	% within Relative Risk (Less > More) 100%

Table E.2

Chi-Square Tests: Relative and Absolute Risk Statements

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	50.286 ^a	1	.000		
Continuity Correction ^b	49.140	1	.000		
Likelihood Ratio	51.424	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	50.224	1	.000		
N of Valid Cases	807				

Notes: ^a 0 cells (.0%) have expected count less than 5. The min. expected count is 99.37.

^b Computed only for a 2x2 table

Table E.3
Religious Affiliations and Absolute Statement Endorsement

			Absolute Risk (None > Some)		Total
			No	Yes	
Religious Affiliation	Catholic	Count	42 _a	142 _a	184
		% within Religious Affiliation	22.8%	77.2%	100.0%
	Protestant	Count	49 _a	184 _a	233
		% within Religious Affiliation	21.0%	79.0%	100.0%
	Born-again Christian	Count	41 _a	114 _a	155
% within Religious Affiliation		26.5%	73.5%	100.0%	
Other	Count	25 _a	82 _a	107	
	% within Religious Affiliation	23.4%	76.6%	100.0%	
No religion	Count	44 _a	82 _b	126	
	% within Religious Affiliation	34.9%	65.1%	100.0%	
Total	Count	201	604	805	
	% within Religious Affiliation	25.0%	75.0%	100.0%	

Notes: _{a, b} Each subscript letter denotes a subset of Absolute Risk (None > Some) categories whose column proportions do not differ significantly from each other at the $p < .05$ level.

Table E.4

Chi-Square Tests: Religious Affiliations and Absolute Endorsement

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.370 ^a	4	.052
Likelihood Ratio	8.976	4	.062
Linear-by-Linear Association	5.628	1	.018
N of Valid Cases	805		

Notes: ^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.72.

Table E.5
Religious Affiliations and Relative Statement Endorsement

			Relative Risk (Less > More)		Total
			No	Yes	
Religious Affiliation	Catholic	Count	91 _a	93 _a	184
		% within Religious Affiliation	49.5%	50.5%	100.0%
	Protestant	Count	123 _a	110 _a	233
		% within Religious Affiliation	52.8%	47.2%	100.0%
	Born-again Christian	Count	75 _a	80 _a	155
% within Religious Affiliation		48.4%	51.6%	100.0%	
Other	Count	47 _a	60 _a	107	
	% within Religious Affiliation	43.9%	56.1%	100.0%	
No religion	Count	60 _a	66 _a	126	
	% within Religious Affiliation	47.6%	52.4%	100.0%	
Total	Count	396	409	805	
	% within Religious Affiliation	49.2%	50.8%	100.0%	

Notes: _a. Each subscript letter denotes a subset of Relative Risk (Less > More) categories whose column proportions do not differ significantly from each other at the .05 level.

Table E.6

Chi-Square Tests: Religious Affiliations and Relative Endorsement

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.564 ^a	4	.633
Likelihood Ratio	2.568	4	.633
Linear-by-Linear Association	1.279	1	.258
N of Valid Cases	805		

Notes: ^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 52.64.

Table E.7*Religious Affiliation (by Religious Commitment) and Absolute Statement Endorsement*

			1 Absolute Risk (None > Some)		Total
			No	Yes	
Religious Affiliation (Categories by Religiosity)	No Religion	Count % within Religious Affiliation (Categories by Religiosity)	44 34.9%	82 65.1%	126 100.0%
	Other & Catholic	Count % within Religious Affiliation (Categories by Religiosity)	67 23.0%	224 77.0%	291 100.0%
	Born-again & Protestant	Count % within Religious Affiliation (Categories by Religiosity)	90 23.2%	298 76.8%	388 100.0%
Total		Count % within Religious Affiliation (Categories by Religiosity)	201 25.0%	604 75.0%	805 100.0%

Table E.8*Chi-Square Tests: Religious Affiliation (by Religious Commitment) and Absolute Endorsement*

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.899 ^a	2	.019
Likelihood Ratio	7.443	2	.024
Linear-by-Linear Association	4.689	1	.030
N of Valid Cases	805		

Notes: ^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 31.46.

Table E.9*Religious Affiliation (by Religious Commitment) and Relative Statement Endorsement*

			Relative Risk (Less > More)		Total
			NO	YES	
Religious Affiliation (Categories by Religiosity)	No Religion	Count % within Religious Affiliation (Categories by Religiosity)	60 47.6%	66 52.4%	126 100.0%
	Other & Catholic	Count % within Religious Affiliation (Categories by Religiosity)	138 47.4%	153 52.6%	291 100.0%
	Born-again & Protestant	Count % within Religious Affiliation (Categories by Religiosity)	198 51.0%	190 49.0%	388 100.0%
Total		Count % within Religious Affiliation (Categories by Religiosity)	396 49.2%	409 50.8%	805 100.0%

Table E.10

Chi-Square Tests: Religious Affiliation (by Religious Commitment) and Relative Endorsement

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.014 ^a	2	.602
Likelihood Ratio	1.014	2	.602
Linear-by-Linear Association	.774	1	.379
N of Valid Cases	805		

Notes: ^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 61.98.

Table E.11
Identify as Religious and Absolute Statement Endorsement

			Absolute Risk (None > Some)		Total
			No	Yes	
Identify as Religious	Not Religious	Count % within Identify as Religious	44 34.9%	82 65.1%	126 100.0%
	Religious	Count % within Identify as Religious	157 23.1%	522 76.9%	679 100.0%
Total		Count % within Identify as Religious	201 25.0%	604 75.0%	805 100.0%

Table E.12*Chi-Square Tests: Identify as Religious and Absolute Endorsement*

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.897 ^a	1	.005		
Continuity Correction ^b	7.280	1	.007		
Likelihood Ratio	7.440	1	.006		
Fisher's Exact Test				.007	.004
Linear-by-Linear Association	7.887	1	.005		
N of Valid Cases	805				

Notes: ^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 31.46.

^b Computed only for a 2x2 table

Table E.13*Identify as Religious and Relative Statement Endorsement*

			Relative Risk (Less > More)		Total
			N	Yes	
Identify as Religious	Not Religious	Count % within Identify as Religious	60 47.6%	66 52.4%	126 100.0%
	Religious	Count % within Identify as Religious	336 49.5%	343 50.5%	679 100.0%
Total		Count % within Identify as Religious	396 49.2%	409 50.8%	805 100.0%

Table E.14*Chi-Square Tests: Identify as Religious and Relative Statement Endorsement*

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.148 ^a	1	.700		
Continuity Correction ^b	.083	1	.774		
Likelihood Ratio	.148	1	.700		
Fisher's Exact Test				.771	.387
Linear-by-Linear Association	.148	1	.701		
N of Valid Cases	805				

Notes: ^a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 61.98.

^b. Computed only for a 2x2 table

APPENDIX F

Analysis of Variance (ANOVA)

Table F.1

Estimates – Dependent Variable: Absolute Risk (None > Some)

Time Without Adult Supervision	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Less than 1 hour	.687	.048	.593	.780
1-2 hours	.778	.032	.716	.840
3-4 hours	.781	.031	.721	.841
More than 4 hours	.731	.024	.684	.777

Table F.2

Post Hoc (LSD) – Dependent Variable: Absolute Risk (None > Some)

(I) Time Without Adult Supervision	(J) Time Without Adult Supervision	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Less than 1 hour	1-2 hours	-.09	.057	.111	-.20	.02
	3-4 hours	-.09	.057	.095	-.21	.02
	More than 4 hours	-.04	.053	.410	-.15	.06
1-2 hours	Less than 1 hour	.09	.057	.111	-.02	.20
	3-4 hours	.00	.044	.940	-.09	.08
	More than 4 hours	.05	.039	.231	-.03	.12
3-4 hours	Less than 1 hour	.09	.057	.095	-.02	.21
	1-2 hours	.00	.044	.940	-.08	.09
	More than 4 hours	.05	.039	.191	-.03	.13
More than 4 hours	Less than 1 hour	.04	.053	.410	-.06	.15
	1-2 hours	-.05	.039	.231	-.12	.03
	3-4 hours	-.05	.039	.191	-.13	.03

Notes: Based on observed means.

The error term is Mean Square (Error) = .188.

Table F.3*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.799	3	.266	1.419	.236	.005	.378
Error	150.639	803	.188				

Notes: The F tests the effect of Time Without Adult Supervision. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.4*Estimates – Dependent Variable: Relative Risk (Less > More)*

Time Without Adult Supervision	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Less than 1 hour	.446	.055	.338	.554
1-2 hours	.534	.036	.463	.606
3-4 hours	.527	.035	.458	.597
More than 4 hours	.497	.027	.443	.551

Table F.5*Post Hoc (LSD) – Dependent Variable: Relative Risk (Less > More)*

(I) Time Without Adult Supervision	(J) Time Without Adult Supervision	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Less than 1 hour	1-2 hours	-.09	.066	.179	-.22	.04
	3-4 hours	-.08	.065	.212	-.21	.05
	More than 4 hours	-.05	.061	.404	-.17	.07
1-2 hours	Less than 1 hour	.09	.066	.179	-.04	.22
	3-4 hours	.01	.051	.890	-.09	.11
	More than 4 hours	.04	.046	.412	-.05	.13
3-4 hours	Less than 1 hour	.08	.065	.212	-.05	.21
	1-2 hours	-.01	.051	.890	-.11	.09
	More than 4 hours	.03	.045	.497	-.06	.12
More than 4 hours	Less than 1 hour	.05	.061	.404	-.07	.17
	1-2 hours	-.04	.046	.412	-.13	.05
	3-4 hours	-.03	.045	.497	-.12	.06

Notes: Based on observed means.

The error term is Mean Square (Error) = .250.

Table F.6*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.569	3	.190	.757	.519	.003	.213
Error	201.129	803	.250				

Notes: The F tests the effect of Time Without Adult Supervision. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a Computed using alpha = .05

Table F.7*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Ages 14-17	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
<=14	.718	.038	.643	.792
15	.756	.025	.707	.804
16	.768	.029	.711	.824
>=17	.738	.037	.666	.809

Table F.8*Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Ages 14-17	(J) Ages 14-17	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<=14	15	-.04	.045	.400	-.13	.05
	16	-.05	.048	.294	-.14	.04
	>=17	-.02	.053	.704	-.12	.08
15	<=14	.04	.045	.400	-.05	.13
	16	-.01	.038	.755	-.09	.06
	>=17	.02	.044	.682	-.07	.10
16	<=14	.05	.048	.294	-.04	.14
	15	.01	.038	.755	-.06	.09
	>=17	.03	.046	.520	-.06	.12
>=17	<=14	.02	.053	.704	-.08	.12
	15	-.02	.044	.682	-.10	.07
	16	-.03	.046	.520	-.12	.06

Notes: Based on observed means.

The error term is Mean Square (Error) = .188.

Table F.9*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.240	3	.080	.424	.736	.002	.135
Error	151.198	803	.188				

Notes: The F tests the effect of Age. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.10*Estimates – Dependent Variable: Relative Risk (Less > More)*

Ages 14-17	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
<=14	.481	.044	.395	.567
15	.528	.029	.472	.584
16	.478	.033	.413	.543
>=17	.539	.042	.456	.622

Table F.11*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Ages 14-17	(J) Ages 14-17	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<=14	15	-.05	.052	.371	-.15	.06
	16	.00	.055	.959	-.10	.11
	>=17	-.06	.061	.339	-.18	.06
15	<=14	.05	.052	.371	-.06	.15
	16	.05	.044	.257	-.04	.14
	>=17	-.01	.051	.824	-.11	.09
16	<=14	.00	.055	.959	-.11	.10
	15	-.05	.044	.257	-.14	.04
	>=17	-.06	.054	.256	-.17	.04
>=17	<=14	.06	.061	.339	-.06	.18
	15	.01	.051	.824	-.09	.11
	16	.06	.054	.256	-.04	.17

Notes: Based on observed means.

The error term is Mean Square (Error) = .250.

Table F.12*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.555	3	.185	.738	.529	.003	.209
Error	201.143	803	.250				

Notes: The F tests the effect of Age. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a Computed using alpha = .05

Table F.13*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Ethnicity	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Caucasian/White	.744	.023	.699	.788
Mexican, Central, or South American	.724	.038	.649	.800
African-American/Black	.750	.029	.693	.807
Other	.806	.045	.718	.895

Table F.14*Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Caucasian/White	Mexican, Central, or South American	.02	.045	.665	-.07	.11
	African-American/Black	-.01	.037	.866	-.08	.07
	Other	-.06	.050	.214	-.16	.04
Mexican, Central, or South American	Caucasian/White	-.02	.045	.665	-.11	.07
	African-American/Black	-.03	.048	.595	-.12	.07
	Other	-.08	.059	.166	-.20	.03
African-American/Black	Caucasian/White	.01	.037	.866	-.07	.08
	Mexican, Central, or South American	.03	.048	.595	-.07	.12
	Other	-.06	.054	.292	-.16	.05
Other	Caucasian/White	.06	.050	.214	-.04	.16
	Mexican, Central, or South American	.08	.059	.166	-.03	.20
	African-American/Black	.06	.054	.292	-.05	.16

Notes: Based on observed means.

The error term is Mean Square (Error) = .188.

Table F.15*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.393	3	.131	.697	.554	.003	.199
Error	151.044	803	.188				

Notes: The F tests the effect of Ethnicity. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a Computed using alpha = .05

Table F.16*Estimates – Dependent Variable: Relative Risk (Less > More)*

Ethnicity	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Caucasian/White	.540	.026	.488	.591
Mexican, Central, or South American	.472	.044	.385	.560
African-American/Black	.491	.033	.425	.557
Other	.473	.052	.371	.575

Table F.17*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Caucasian/White	Mexican, Central, or South American	.07	.052	.191	-.03	.17
	African-American/Black	.05	.043	.251	-.03	.13
	Other	.07	.058	.251	-.05	.18
Mexican, Central, or South American	Caucasian/White	-.07	.052	.191	-.17	.03
	African-American/Black	-.02	.056	.738	-.13	.09
	Other	.00	.068	.992	-.13	.13
African-American/Black	Caucasian/White	-.05	.043	.251	-.13	.03
	Mexican, Central, or South American	.02	.056	.738	-.09	.13
	Other	.02	.062	.771	-.10	.14
Other	Caucasian/White	-.07	.058	.251	-.18	.05
	Mexican, Central, or South American	.00	.068	.992	-.13	.13
	African-American/Black	-.02	.062	.771	-.14	.10

Notes: Based on observed means.

The error term is Mean Square (Error) = .250.

Table F.18*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.708	3	.236	.943	.419	.004	.259
Error	200.989	803	.250				

Notes: The F tests the effect of Ethnicity. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a Computed using alpha = .05

Table F.19*Estimates – Dependent Variable: Absolute Risk (None > Some)*

“Do you get a free lunch?”	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No	.772	.018	.736	.807
Yes	.706	.030	.647	.765

Table F.20*Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Do you get a free lunch?	(J) Do you get a free lunch?	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
No	Yes	.066	.035	.061	-.003	.135
Yes	No	-.066	.035	.061	-.135	.003

Notes: Based on estimated marginal means

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.21*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.651	1	.651	3.518	.061	.005	.465
Error	141.148	763	.185				

Notes: The F tests the effect of “Do you get a free lunch?” This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.22*Estimates – Dependent Variable: Relative Risk (Less > More)*

“Do you get a free lunch?”	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No	.508	.021	.467	.550
Yes	.505	.035	.436	.574

Table F.23*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Do you get a free lunch?	(J) Do you get a free lunch?	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
No	Yes	.003	.041	.939	-.077	.083
Yes	No	-.003	.041	.939	-.083	.077

Notes: Based on estimated marginal means

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.24*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.001	1	.001	.006	.939	.000	.051
Error	191.209	763	.251				

Notes: The F tests the effect of “Do you get a free lunch?” This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.25*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Gender	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male	.729	.024	.683	.776
Female	.764	.020	.725	.803

Table F.26*Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Gender	(J) Gender	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Male	Female	-.034	.031	.272	-.095	.027
Female	Male	.034	.031	.272	-.027	.095

Notes: Based on estimated marginal means^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.27***Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.227	1	.227	1.207	.272	.001	.195
Error	151.211	805	.188				

Notes: The F tests the effect of Gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.28*Estimates – Dependent Variable: Relative Risk (Less > More)*

Gender	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male	.544	.028	.490	.598
Female	.483	.023	.438	.528

Table F.29*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Gender	(J) Gender	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Male	Female	.061	.036	.090	-.009	.131
Female	Male	-.061	.036	.090	-.131	.009

Notes: Based on estimated marginal means^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.30***Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.721	1	.721	2.886	.090	.004	.396
Error	200.977	805	.250				

Notes: The F tests the effect of Gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.31*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Living Status (3 Cat)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Live w/ Both Parents	.782	.022	.739	.825
Live w/ One Parent	.694	.030	.635	.753
Other Living Arrangement	.744	.030	.686	.803

Table F.32*Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Living Status (3 Cat)	(J) Living Status (3 Cat)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Live w/ Both Parents	Live w/ One Parent	.09*	.037	.019	.01	.16
	Other Living Arrangement	.04	.037	.305	-.03	.11
Live w/ One Parent	Live w/ Both Parents	-.09*	.037	.019	-.16	-.01
	Other Living Arrangement	-.05	.042	.239	-.13	.03
Other Living Arrangement	Live w/ Both Parents	-.04	.037	.305	-.11	.03
	Live w/ One Parent	.05	.042	.239	-.03	.13

Notes: Based on observed means.

The error term is Mean Square (Error) = .187.

*. The mean difference is significant at the .05 level.

Table F.33*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	1.050	2	.525	2.807	.061	.007	.552
Error	150.387	804	.187				

Notes: The F tests the effect of Living Status (3 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.34*Estimates – Dependent Variable: Relative Risk (Less > More)*

Living Status (3 Cat)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Live w/ Both Parents	.497	.025	.448	.547
Live w/ One Parent	.510	.035	.441	.578
Other Living Arrangement	.526	.034	.458	.594

Table F.35*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Living Status (3 Cat)	(J) Living Status (3 Cat)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Live w/ Both Parents	Live w/ One Parent	-.01	.043	.776	-.10	.07
	Other Living Arrangement	-.03	.043	.504	-.11	.06
Live w/ One Parent	Live w/ Both Parents	.01	.043	.776	-.07	.10
	Other Living Arrangement	-.02	.049	.739	-.11	.08
Other Living Arrangement	Live w/ Both Parents	.03	.043	.504	-.06	.11
	Live w/ One Parent	.02	.049	.739	-.08	.11

Notes: Based on observed means.

The error term is Mean Square (Error) = .251.

Table F.36*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.113	2	.056	.225	.798	.001	.085
Error	201.585	804	.251				

Notes: The F tests the effect of Living Status (3 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.37*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Average Parental Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Some High School	.660	.060	.542	.778
In Between Some/Graduated High School	.694	.071	.556	.833
Graduated High School	.743	.036	.672	.813
In Between Graduated/Some High School/College	.798	.044	.712	.884
Some College	.780	.035	.712	.848
In Between Some/Graduated College	.802	.044	.715	.890
Graduated College	.778	.032	.714	.841

Table F.38

Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)

(I) Average Parental Education	(J) Average Parental Education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Some High School	In Between Some/Graduated High School	-.03	.093	.710	-.22	.15
	Graduated High School In Between	-.08	.070	.236	-.22	.05
	Graduated/Some High School/College	-.14	.074	.064	-.28	.01
	Some College	-.12	.069	.084	-.26	.02
	In Between Some/Graduated College	-.14	.075	.057	-.29	.00
	Graduated College	-.12	.068	.085	-.25	.02
	In Between Some/Graduated High School	Some High School	.03	.093	.710	-.15
Graduated High School		-.05	.079	.542	-.20	.11
In Between Graduated/Some High School/College		-.10	.083	.214	-.27	.06
Some College		-.09	.079	.278	-.24	.07
In Between Some/Graduated College		-.11	.084	.197	-.27	.06
Graduated College		-.08	.078	.284	-.24	.07
Graduated High School	Some High School	.08	.070	.236	-.05	.22
	In Between Some/Graduated High School	.05	.079	.542	-.11	.20
	In Between Graduated/Some High School/College	-.06	.057	.331	-.17	.06
	Some College	-.04	.050	.457	-.14	.06
	In Between Some/Graduated College	-.06	.057	.299	-.17	.05
	Graduated College	-.03	.048	.470	-.13	.06
	In Between Graduated/Some High	Some High School	.14	.074	.064	-.01
In Between Some/Graduated High School		.10	.083	.214	-.06	.27
Graduated High School		.06	.057	.331	-.06	.17
Some College		.02	.056	.749	-.09	.13

	In Between	.00	.062	.945	-.13	.12
	Some/Graduated College	.02	.054	.712	-.09	.13
Some College	Some High School	.12	.069	.084	-.02	.26
	In Between	.09	.079	.278	-.07	.24
	Some/Graduated High School	.04	.050	.457	-.06	.14
	Graduated High School	-.02	.056	.749	-.13	.09
	In Between	-.02	.056	.694	-.13	.09
	Some/Graduated College	.00	.047	.963	-.09	.10
In Between Some/Graduated College	Some High School	.14	.075	.057	.00	.29
	In Between	.11	.084	.197	-.06	.27
	Some/Graduated High School	.06	.057	.299	-.05	.17
	Graduated High School	.00	.062	.945	-.12	.13
	In Between	.02	.056	.694	-.09	.13
	Graduated/Some High School/College	.02	.055	.657	-.08	.13
Graduated College	Some High School	.12	.068	.085	-.02	.25
	In Between	.08	.078	.284	-.07	.24
	Some/Graduated High School	.03	.048	.470	-.06	.13
	Graduated High School	-.02	.054	.712	-.13	.09
	In Between	.00	.047	.963	-.10	.09
	Graduated/Some High School/College	-.02	.055	.657	-.13	.08
	Some College					

Based on observed means.

The error term is Mean Square (Error) = .180.

Table F.39*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	1.088	6	.181	1.008	.419	.008	.402
Error	130.496	725	.180				

Notes: The F tests the effect of Average Parental Education. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.40*Estimates – Dependent Variable: Relative Risk (Less > More)*

Average Parental Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Some High School	.480	.071	.341	.619
In Between Some/Graduated High School	.528	.084	.364	.692
Graduated High School	.486	.042	.403	.569
In Between Graduated/Some High School/College	.489	.052	.388	.591
Some College	.547	.041	.466	.627
In Between Some/Graduated College	.549	.053	.446	.653
Graduated College	.520	.038	.445	.596

Table F.41*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Average Parental Education	(J) Average Parental Education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Some High School	In Between Some/Graduated High School	-.05	.110	.663	-.26	.17
	Graduated High School In Between	-.01	.083	.945	-.17	.16
	Graduated/Some High School/College	-.01	.088	.915	-.18	.16
	Some College	-.07	.082	.416	-.23	.09
	In Between Some/Graduated College	-.07	.088	.432	-.24	.10
	Graduated College	-.04	.081	.616	-.20	.12
	In Between Some/Graduated High School	Some High School	.05	.110	.663	-.17
Graduated High School		.04	.094	.654	-.14	.23
In Between Graduated/Some High School/College		.04	.098	.696	-.15	.23
Some College		-.02	.093	.839	-.20	.16
In Between Some/Graduated College		-.02	.099	.826	-.22	.17
Graduated College		.01	.092	.937	-.17	.19
Graduated High School	Some High School	.01	.083	.945	-.16	.17
	In Between Some/Graduated High School	-.04	.094	.654	-.23	.14
	In Between Graduated/Some High School/College	.00	.067	.957	-.13	.13
	Some College	-.06	.059	.301	-.18	.05
	In Between Some/Graduated College	-.06	.068	.346	-.20	.07
	Graduated College	-.03	.057	.543	-.15	.08
In Between Graduated/Some High	Some High School	.01	.088	.915	-.16	.18
	In Between Some/Graduated High School	-.04	.098	.696	-.23	.15
	Graduated High School	.00	.067	.957	-.13	.13
	Some College	-.06	.066	.385	-.19	.07

	In Between					
	Some/Graduated College	-.06	.074	.415	-.20	.08
	Graduated College	-.03	.064	.629	-.16	.10
Some College	Some High School	.07	.082	.416	-.09	.23
	In Between					
	Some/Graduated High School	.02	.093	.839	-.16	.20
	Graduated High School	.06	.059	.301	-.05	.18
	In Between					
	Graduated/Some High School/College	.06	.066	.385	-.07	.19
	In Between					
In Between Some/Graduated College	Some/Graduated College	.00	.067	.967	-.13	.13
	Graduated College	.03	.056	.641	-.08	.14
	Some High School	.07	.088	.432	-.10	.24
	In Between					
	Some/Graduated High School	.02	.099	.826	-.17	.22
	Graduated High School	.06	.068	.346	-.07	.20
	In Between					
Graduated College	Graduated/Some High School/College	.06	.074	.415	-.08	.20
	Some College	.00	.067	.967	-.13	.13
	Graduated College	.03	.065	.656	-.10	.16
	Some High School	.04	.081	.616	-.12	.20
	In Between					
	Some/Graduated High School	-.01	.092	.937	-.19	.17
	Graduated High School	.03	.057	.543	-.08	.15
In Between						
Graduated College	Graduated/Some High School/College	.03	.064	.629	-.10	.16
	Some College	-.03	.056	.641	-.14	.08
	In Between					
	Some/Graduated College	-.03	.065	.656	-.16	.10
	Graduated College					

Based on observed means.

The error term is Mean Square (Error) = .251.

Table F.42*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.511	6	.085	.339	.916	.003	.147
Error	182.292	725	.251				

Notes: The F tests the effect of Average Parental Education. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.43*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Usual Grades in School	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
A'S	.805	.028	.751	.860
B'S	.778	.022	.735	.821
C'S	.634	.034	.568	.699
D'S	.762	.093	.579	.945
F'S	.273	.129	.020	.525

Table F.44*Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Usual Grades in School	(J) Usual Grades in School	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A'S	B'S	.03	.035	.440	-.04	.10
	C'S	.17*	.044	.000	.09	.26
	D'S	.04	.097	.657	-.15	.23
	F'S	.53*	.131	.000	.27	.79
B'S	A'S	-.03	.035	.440	-.10	.04
	C'S	.14*	.040	.000	.07	.22
	D'S	.02	.096	.868	-.17	.20
	F'S	.51*	.130	.000	.25	.76
C'S	A'S	-.17*	.044	.000	-.26	-.09
	B'S	-.14*	.040	.000	-.22	-.07
	D'S	-.13	.099	.195	-.32	.07
	F'S	.36*	.133	.007	.10	.62
D'S	A'S	-.04	.097	.657	-.23	.15
	B'S	-.02	.096	.868	-.20	.17
	C'S	.13	.099	.195	-.07	.32
	F'S	.49*	.159	.002	.18	.80
F'S	A'S	-.53*	.131	.000	-.79	-.27
	B'S	-.51*	.130	.000	-.76	-.25
	C'S	-.36*	.133	.007	-.62	-.10
	D'S	-.49*	.159	.002	-.80	-.18

Notes: Based on observed means.

The error term is Mean Square (Error) = .182.

*. The mean difference is significant at the .05 level.

Table F.45*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	5.700	4	1.425	7.842	.000	.038	.998
Error	145.737	802	.182				

Notes: The F tests the effect of Usual Grades in School. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

+ Computed using alpha = .05

Table F.46*Estimates – Dependent Variable: Relative Risk (Less > More)*

Usual Grades in School	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
A'S	.479	.032	.415	.542
B'S	.550	.026	.500	.600
C'S	.503	.039	.426	.580
D'S	.333	.108	.120	.546
F'S	.091	.150	-.203	.385

Table F.47*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Usual Grades in School	(J) Usual Grades in School	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A'S	B'S	-.07	.041	.084	-.15	.01
	C'S	-.02	.051	.633	-.12	.08
	D'S	.15	.113	.199	-.08	.37
	F'S	.39*	.153	.012	.09	.69
B'S	A'S	.07	.041	.084	-.01	.15
	C'S	.05	.047	.314	-.04	.14
	D'S	.22	.111	.052	.00	.44
	F'S	.46*	.152	.003	.16	.76
C'S	A'S	.02	.051	.633	-.08	.12
	B'S	-.05	.047	.314	-.14	.04
	D'S	.17	.115	.141	-.06	.40
	F'S	.41*	.155	.008	.11	.72
D'S	A'S	-.15	.113	.199	-.37	.08
	B'S	-.22	.111	.052	-.44	.00
	C'S	-.17	.115	.141	-.40	.06
	F'S	.24	.185	.191	-.12	.61
F'S	A'S	-.39*	.153	.012	-.69	-.09
	B'S	-.46*	.152	.003	-.76	-.16
	C'S	-.41*	.155	.008	-.72	-.11
	D'S	-.24	.185	.191	-.61	.12

Notes: Based on observed means.

The error term is Mean Square (Error) = .247

*. The mean difference is significant at the .05 level.

Table F.48*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	3.434	4	.859	3.473	.008	.017	.861
Error	198.263	802	.247				

Notes: The F tests the effect of Usual Grades in School. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.49*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Religious Affiliation (Re-Coded)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Catholic	.772	.032	.709	.834
Protestant	.790	.028	.734	.845
Born-again Christian	.735	.035	.667	.804
Other	.766	.042	.684	.848
No religion	.651	.038	.575	.726

Table F.50*Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Religious Affiliation (Re-Coded)	(J) Religious Affiliation (Re-Coded)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Catholic	Protestant	-.02	.043	.673	-.10	.07
	Born-again Christian	.04	.047	.441	-.06	.13
	Other	.01	.052	.918	-.10	.11
	No religion	.12*	.050	.016	.02	.22
Protestant	Catholic	.02	.043	.673	-.07	.10
	Born-again Christian	.05	.045	.226	-.03	.14
	Other	.02	.050	.643	-.08	.12
	No religion	.14*	.048	.004	.05	.23
Born-again Christian	Catholic	-.04	.047	.441	-.13	.06
	Protestant	-.05	.045	.226	-.14	.03
	Other	-.03	.054	.569	-.14	.08
	No religion	.08	.052	.102	-.02	.19
Other	Catholic	-.01	.052	.918	-.11	.10
	Protestant	-.02	.050	.643	-.12	.08
	Born-again Christian	.03	.054	.569	-.08	.14
	No religion	.12*	.057	.042	.00	.23
No religion	Catholic	-.12*	.050	.016	-.22	-.02
	Protestant	-.14*	.048	.004	-.23	-.05
	Born-again Christian	-.08	.052	.102	-.19	.02
	Other	-.12*	.057	.042	-.23	.00

Notes: Based on observed means.

The error term is Mean Square (Error) = .186.

*. The mean difference is significant at the .05 level.

Table F.51*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	1.755	4	.439	2.355	.052	.012	.683
Error	149.057	800	.186				

Notes: The F tests the effect of Religious Affiliation (Re-Coded). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.52*Estimates – Dependent Variable: Relative Risk (Less > More)*

Religious Affiliation (Re-Coded)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Catholic	.505	.037	.433	.578
Protestant	.472	.033	.408	.536
Born-again Christian	.516	.040	.437	.595
Other	.561	.048	.466	.656
No religion	.524	.045	.436	.611

Table F.53*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Religious Affiliation (Re-Coded)	(J) Religious Affiliation (Re-Coded)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Catholic	Protestant	.03	.049	.500	-.06	.13
	Born-again Christian	-.01	.055	.845	-.12	.10
	Other	-.06	.061	.364	-.17	.06
	No religion	-.02	.058	.751	-.13	.10
Protestant	Catholic	-.03	.049	.500	-.13	.06
	Born-again Christian	-.04	.052	.397	-.15	.06
	Other	-.09	.058	.130	-.20	.03
	No religion	-.05	.055	.351	-.16	.06
Born-again Christian	Catholic	.01	.055	.845	-.10	.12
	Protestant	.04	.052	.397	-.06	.15
	Other	-.04	.063	.479	-.17	.08
	No religion	-.01	.060	.898	-.13	.11
Other	Catholic	.06	.061	.364	-.06	.17
	Protestant	.09	.058	.130	-.03	.20
	Born-again Christian	.04	.063	.479	-.08	.17
	No religion	.04	.066	.575	-.09	.17
No religion	Catholic	.02	.058	.751	-.10	.13
	Protestant	.05	.055	.351	-.06	.16
	Born-again Christian	.01	.060	.898	-.11	.13
	Other	-.04	.066	.575	-.17	.09

Notes: Based on observed means.

The error term is Mean Square (Error) = .251

*. The mean difference is significant at the .05 level.

Table F.54*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.641	4	.160	.639	.635	.003	.210
Error	200.557	800	.251				

Notes: The F tests the effect of Religious Affiliation (Re-Coded). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.55*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No Religion	.651	.038	.575	.726
Other & Catholic	.770	.025	.720	.819
Born-again & Protestant	.768	.022	.725	.811

Table F.56*Multiple Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Religious Affiliation (Categories by Aggregate Religious Commitment)	(J) Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No Religion	Other & Catholic	-.12*	.046	.010	-.21	-.03
	Born-again & Protestant	-.12*	.044	.008	-.20	-.03
Other & Catholic	No Religion	.12*	.046	.010	.03	.21
	Born-again & Protestant	.00	.033	.959	-.06	.07
Born-again & Protestant	No Religion	.12*	.044	.008	.03	.20
	Other & Catholic	.00	.033	.959	-.07	.06

Notes: Based on observed means.

The error term is Mean Square (Error) = .186.

*. The mean difference is significant at the .05 level.

Table F.57*Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	1.480	2	.740	3.974	.019	.010	.713
Error	149.333	802	.186				

Notes: The F tests the effect of Religious Affiliation (Categories by Aggregate Religious Commitment). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.58*Estimates – Dependent Variable: Relative Risk (Less > More)*

Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No Religion	.524	.045	.436	.611
Other & Catholic	.526	.029	.468	.583
Born-again & Protestant	.490	.025	.440	.540

Table F.59*Multiple Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Religious Affiliation (Categories by Aggregate Religious Commitment)	(J) Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No Religion	Other & Catholic	.00	.053	.971	-.11	.10
	Born-again & Protestant	.03	.051	.506	-.07	.13
Other & Catholic	No Religion	.00	.053	.971	-.10	.11
	Born-again & Protestant	.04	.039	.353	-.04	.11
Born-again & Protestant	No Religion	-.03	.051	.506	-.13	.07
	Other & Catholic	-.04	.039	.353	-.11	.04

Notes: Based on observed means.

The error term is Mean Square (Error) = .251

*. The mean difference is significant at the .05 level.

Table F.60*Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.253	2	.127	.506	.603	.001	.133
Error	200.944	802	.251				

Notes: The F tests the effect of Religious Affiliation (Categories by Aggregate Religious Commitment). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a Computed using alpha = .05

Table F.61*Estimates – Dependent Variable: Absolute Risk (None > Some)*

Identify as Religious	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Not Religious	.651	.038	.575	.726
Religious	.769	.017	.736	.801

Table F.62*Pairwise Comparisons – Dependent Variable: Absolute Risk (None > Some)*

(I) Identify as Religious	(J) Identify as Religious	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Not Religious	Religious	-.118*	.042	.005	-.200	-.036
Religious	Not Religious	.118*	.042	.005	.036	.200

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.63***Univariate Tests – Dependent Variable: Absolute Risk (None > Some)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	1.479	1	1.479	7.955	.005	.010	.804
Error	149.333	803	.186				

Notes: The F tests the effect of Identify as Religious. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.64*Estimates – Dependent Variable: Relative Risk (Less > More)*

Identify as Religious	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Not Religious	.524	.045	.436	.611
Religious	.505	.019	.467	.543

Table F.65*Pairwise Comparisons – Dependent Variable: Relative Risk (Less > More)*

(I) Identify as Religious	(J) Identify as Religious	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Not Religious	Religious	.019	.049	.701	-.077	.114
Religious	Not Religious	-.019	.049	.701	-.114	.077

Notes: Based on estimated marginal means^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.66***Univariate Tests – Dependent Variable: Relative Risk (Less > More)*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.037	1	.037	.148	.701	.000	.067
Error	201.161	803	.251				

Notes: The F tests the effect of Identify as Religious. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.67*Estimates – Dependent Variable: Time Without Adult Supervision*

Living Status (3 Cat)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Live w/ Both Parents	2.774	.051	2.674	2.875
Live w/ One Parent	3.194	.071	3.056	3.333
Other Living Arrangement	3.128	.070	2.991	3.265

Table F.68*Pairwise Comparisons – Dependent Variable: Time Without Adult Supervision*

(I) Living Status (3 Cat)	(J) Living Status (3 Cat)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Live w/ Both Parents	Live w/ One Parent	-.420*	.087	.000	-.591	-.249
	Other Living Arrangement	-.354*	.087	.000	-.523	-.184
Live w/ One Parent	Live w/ Both Parents	.420*	.087	.000	.249	.591
	Other Living Arrangement	.066	.099	.504	-.128	.261
Other Living Arrangement	Live w/ Both Parents	.354*	.087	.000	.184	.523
	Live w/ One Parent	-.066	.099	.504	-.261	.128

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.69*Univariate Tests – Dependent Variable: Time Without Adult Supervision*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	30.532	2	15.266	14.897	.000	.036	.999
Error	823.922	804	1.025				

Notes: The F tests the effect of Living Status (3 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.70*Descriptive Statistics – Dependent Variable: Aggregate Delinquency Scale*

Absolute Risk (None > Some)	Relative Risk (Less > More)	Mean	Std. Deviation	N
No	No	6.02	5.697	143
	Yes	6.61	4.899	59
	Total	6.19	5.471	202
Yes	No	4.43	4.591	254
	Yes	5.35	4.804	351
	Total	4.96	4.734	605
Total	No	5.00	5.068	397
	Yes	5.53	4.832	410
	Total	5.27	4.954	807

Table F.71*Tests of Between-Subjects Effects – Dependent Variable: Aggregate Delinquency Scale*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Corrected Model	368.319 ^a	3	122.77	5.079	.002	.019	15.237	.920
Intercept	16340.453	1	16340.45	675.984	.000	.457	675.984	1.000
Absolute Risk	265.158	1	265.16	10.969	.001	.013	10.969	.911
Relative Risk	73.970	1	73.97	3.060	.081	.004	3.060	.416
Absolute Risk *	3.528	1	3.53	.146	.703	.000	.146	.067
Relative Risk								
Error	19410.791	803	24.17					
Total	42193.000	807						
Corrected Total	19779.110	806						

^a. R Squared = .019 (Adjusted R Squared = .015)^b. Computed using alpha = .05

Table F.72*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Absolute Risk (None > Some)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
NO	6.316	.380	5.569	7.062
YES	4.888	.203	4.491	5.286

Table F.73*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Absolute Risk (None > Some)	(J) Absolute Risk (None > Some)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
NO	YES	1.427 [*]	.431	.001	.581	2.273
YES	NO	-1.427 [*]	.431	.001	-2.273	-.581

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.74*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	265.158	1	265.158	10.969	.001	.013	.911
Error	19410.791	803	24.173				

Notes: The F tests the effect of Absolute Risk (None > Some). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.75*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Relative Risk (Less > More)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
NO	5.225	.257	4.721	5.730
YES	5.979	.346	5.300	6.658

Table F.76*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Relative Risk (Less > More)	(J) Relative Risk (Less > More)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
NO	YES	-.754	.431	.081	-1.600	.092
YES	NO	.754	.431	.081	-.092	1.600

Notes: Based on estimated marginal means

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.77*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	73.970	1	73.970	3.060	.081	.004	.416
Error	19410.791	803	24.173				

Notes: The F tests the effect of Relative Risk (Less > More). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.78*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Time Without Adult Supervision	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Less than 1 hour	4.157	.534	3.108	5.205
1-2 hours	4.021	.354	3.326	4.716
3-4 hours	5.174	.343	4.500	5.848
More than 4 hours	6.311	.266	5.789	6.834

Table F.79*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	761.709	3	253.903	10.721	.000	.039	32.163
Error	19017.401	803	23.683				

Notes: The F tests the effect of Time Without Adult Supervision. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.80*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Time Without Adult Supervision	(J) Time Without Adult Supervision	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Less than 1 hour	1-2 hours	.135	.641	.833	-1.122	1.393
	3-4 hours	-1.018	.635	.109	-2.264	.229
	More than 4 hours	-2.155*	.597	.000	-3.326	-.983
1-2 hours	Less than 1 hour	-.135	.641	.833	-1.393	1.122
	3-4 hours	-1.153*	.493	.020	-2.121	-.185
	More than 4 hours	-2.290*	.443	.000	-3.160	-1.421
3-4 hours	Less than 1 hour	1.018	.635	.109	-.229	2.264
	1-2 hours	1.153*	.493	.020	.185	2.121
	More than 4 hours	-1.137*	.434	.009	-1.990	-.284
More than 4 hours	Less than 1 hour	2.155*	.597	.000	.983	3.326
	1-2 hours	2.290*	.443	.000	1.421	3.160
	3-4 hours	1.137*	.434	.009	.284	1.990

Notes: Based on estimated marginal means^a Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.81*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Ages 14-17	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
<=14	4.374	.431	3.529	5.220
15	4.980	.281	4.428	5.533
16	5.671	.327	5.030	6.312
>=17	6.085	.415	5.270	6.900

Table F.82*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Ages 14-17	(J) Ages 14-17	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
<=14	15	-.606	.515	.239	-1.616	.404
	16	-1.297*	.541	.017	-2.358	-.236
	>=17	-1.711*	.598	.004	-2.885	-.537
15	<=14	.606	.515	.239	-.404	1.616
	16	-.691	.431	.109	-1.537	.155
	>=17	-1.105*	.502	.028	-2.089	-.120
16	<=14	1.297*	.541	.017	.236	2.358
	15	.691	.431	.109	-.155	1.537
	>=17	-.414	.528	.433	-1.451	.623
>=17	<=14	1.711*	.598	.004	.537	2.885
	15	1.105*	.502	.028	.120	2.089
	16	.414	.528	.433	-.623	1.451

Notes: Based on estimated marginal means^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.83*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	261.248	3	87.083	3.583	.014	.013	10.748
Error	19517.862	803	24.306				

Notes: The F tests the effect of Ages. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.84*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Ethnicity	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Caucasian/White	5.532	.260	5.022	6.042
Mexican, Central, or South American	5.622	.439	4.760	6.484
African-American/Black	4.799	.331	4.150	5.448
Other	4.903	.513	3.896	5.911

Table F.85*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Caucasian/White	Mexican, Central, or South American	-.090	.510	.859	-1.092	.911
	African-American/Black	.733	.421	.082	-.093	1.558
	Other	.628	.575	.275	-.501	1.758
Mexican, Central, or South American	Caucasian/White	.090	.510	.859	-.911	1.092
	African-American/Black	.823	.550	.135	-.256	1.902
	Other	.719	.676	.288	-.607	2.045
African-American/Black	Caucasian/White	-.733	.421	.082	-1.558	.093
	Mexican, Central, or South American	-.823	.550	.135	-1.902	.256
	Other	-.104	.611	.865	-1.303	1.095
Other	Caucasian/White	-.628	.575	.275	-1.758	.501
	Mexican, Central, or South American	-.719	.676	.288	-2.045	.607
	African-American/Black	.104	.611	.865	-1.095	1.303

Notes: Based on estimated marginal means^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.86*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	102.777	3	34.259	1.398	.242	.005	4.194
Error	19676.333	803	24.504				

Notes: The F tests the effect of Ethnicity. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a Computed using alpha = .05

Table F.87*Estimates – Dependent Variable: Aggregate Delinquency Scale*

“Do you get a free lunch?”	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No	5.201	.208	4.793	5.609
Yes	5.435	.321	4.806	6.064

Table F.88*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) “Do you get a free lunch?”	(J) “Do you get a free lunch?”	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
No	Yes	-.234	.382	.540	-.984	.516
Yes	No	.234	.382	.540	-.516	.984

Notes: Based on estimated marginal means

^a Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.89*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	9.246	1	9.246	.376	.540	.000	.376
Error	19769.864	805	24.559				

Notes: The F tests the effect of “Do you get a free lunch?” This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a Computed using alpha = .05

Table F.90*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Gender	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male	5.283	.273	4.746	5.819
Female	5.262	.227	4.816	5.707

Table F.91*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Gender	(J) Gender	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Male	Female	.021	.355	.952	-.676	.718
Female	Male	-.021	.355	.952	-.718	.676

Notes: Based on estimated marginal means

^a Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Tables F.92*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	.087	1	.087	.004	.952	.000	.004
Error	19779.023	805	24.570				

Notes: The F tests the effect of Gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.93*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Living Status (3 Cat)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Live w/ Both Parents	4.359	.247	3.874	4.844
Live w/ One Parent	6.325	.340	5.658	6.992
Other Living Arrangement	5.924	.336	5.265	6.583

Table F.94*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Living Status (3 Cat)	(J) Living Status (3 Cat)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Live w/ Both Parents	Live w/ One Parent	-1.966*	.420	.000	-2.791	-1.141
	Other Living Arrangement	-1.565*	.417	.000	-2.384	-.747
Live w/ One Parent	Live w/ Both Parents	1.966*	.420	.000	1.141	2.791
	Other Living Arrangement	.401	.478	.402	-.537	1.339
Other Living Arrangement	Live w/ Both Parents	1.565*	.417	.000	.747	2.384
	Live w/ One Parent	-.401	.478	.402	-1.339	.537

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.95*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	643.371	2	321.686	13.516	.000	.033	27.032
Error	19135.739	804	23.801				

Notes: The F tests the effect of Living Status (3 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.96*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Average Parental Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Some High School	6.760	.699	5.388	8.132
In Between Some/Graduated High School	5.583	.823	3.967	7.200
Graduated High School	5.871	.418	5.052	6.691
In Between Graduated/Some High School/College	6.426	.510	5.425	7.426
Some College	4.947	.403	4.155	5.739
In Between Some/Graduated College	4.703	.518	3.687	5.720
Graduated College	4.515	.378	3.773	5.256

Table F.97*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Average Parental Education	(J) Average Parental Education	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Some High School	In Between					
	Some/Graduated High School	1.177	1.080	.276	-.943	3.297
	Graduated High School	.889	.814	.275	-.709	2.487
	In Between					
	Graduated/Some High School/College	.334	.865	.699	-1.363	2.032
	Some College	1.813*	.807	.025	.229	3.397
	In Between					
	Some/Graduated College	2.057*	.870	.018	.349	3.764
	Graduated College	2.245*	.794	.005	.686	3.805
In Between Some/Graduated High School	Some High School	-1.177	1.080	.276	-3.297	.943
	Graduated High School	-.288	.923	.755	-2.101	1.524
	In Between					
	Graduated/Some High School/College	-.842	.968	.385	-2.743	1.059
	Some College	.637	.917	.488	-1.163	2.437
	In Between					
	Some/Graduated College	.880	.973	.366	-1.030	2.790
	Graduated College	1.069	.906	.239	-.710	2.847
Graduated High School	Some High School	-.889	.814	.275	-2.487	.709
	In Between					
	Some/Graduated High School	.288	.923	.755	-1.524	2.101
	In Between					
	Graduated/Some High School/College	-.554	.659	.401	-1.847	.739
	Some College	.925	.581	.112	-.215	2.065
	In Between					
Some/Graduated College	1.168	.665	.080	-.138	2.474	
	Graduated College	1.357*	.563	.016	.251	2.462
In Between Graduated/Some High School/College	Some High School	-.334	.865	.699	-2.032	1.363
	In Between					
	Some/Graduated High School	.842	.968	.385	-1.059	2.743
	Graduated High School	.554	.659	.401	-.739	1.847
	Some College	1.479*	.650	.023	.203	2.755

	In Between Some/Graduated College	1.722 [*]	.727	.018	.296	3.149
	Graduated College	1.911 [*]	.634	.003	.666	3.156
Some College	Some High School	-1.813 [*]	.807	.025	-3.397	-.229
	In Between Some/Graduated High School	-.637	.917	.488	-2.437	1.163
	Graduated High School	-.925	.581	.112	-2.065	.215
	In Between Graduated/Some High School/College	-1.479 [*]	.650	.023	-2.755	-.203
	In Between Some/Graduated College	.243	.656	.711	-1.045	1.532
	Graduated College	.432	.553	.435	-.653	1.517
In Between Some/Graduated College	Some High School	-2.057 [*]	.870	.018	-3.764	-.349
	In Between Some/Graduated High School	-.880	.973	.366	-2.790	1.030
	Graduated High School	-1.168	.665	.080	-2.474	.138
	In Between Graduated/Some High School/College	-1.722 [*]	.727	.018	-3.149	-.296
	Some College	-.243	.656	.711	-1.532	1.045
	Graduated College	.189	.641	.769	-1.070	1.447
Graduated College	Some High School	-2.245 [*]	.794	.005	-3.805	-.686
	In Between Some/Graduated High School	-1.069	.906	.239	-2.847	.710
	Graduated High School	-1.357 [*]	.563	.016	-2.462	-.251
	In Between Graduated/Some High School/College	-1.911 [*]	.634	.003	-3.156	-.666
	Some College	-.432	.553	.435	-1.517	.653
	In Between Some/Graduated College	-.189	.641	.769	-1.447	1.070

Notes: Based on estimated marginal means

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.98*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	429.844	6	71.641	2.935	.008	.024	17.611
Error	17695.810	725	24.408				

Notes: The F tests the effect of Average Parental Education. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.99*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Usual Grades in School	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
A'S	3.462	.306	2.861	4.063
B'S	5.249	.242	4.774	5.724
C'S	7.006	.371	6.279	7.734
D'S	9.524	1.026	7.509	11.539
F'S	11.273	1.418	8.489	14.057

Table F.100*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Usual Grades in School	(J) Usual Grades in School	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
A'S	B'S	-1.787*	.390	.000	-2.553	-1.021
	C'S	-3.544*	.481	.000	-4.488	-2.601
	D'S	-6.062*	1.071	.000	-8.165	-3.959
	F'S	-7.811*	1.451	.000	-10.659	-4.963
B'S	A'S	1.787*	.390	.000	1.021	2.553
	C'S	-1.758*	.443	.000	-2.626	-.889
	D'S	-4.275*	1.055	.000	-6.345	-2.205
	F'S	-6.024*	1.439	.000	-8.848	-3.200
C'S	A'S	3.544*	.481	.000	2.601	4.488
	B'S	1.758*	.443	.000	.889	2.626
	D'S	-2.518*	1.091	.021	-4.660	-.375
	F'S	-4.267*	1.466	.004	-7.144	-1.389
D'S	A'S	6.062*	1.071	.000	3.959	8.165
	B'S	4.275*	1.055	.000	2.205	6.345
	C'S	2.518*	1.091	.021	.375	4.660
	F'S	-1.749	1.751	.318	-5.186	1.688
F'S	A'S	7.811*	1.451	.000	4.963	10.659
	B'S	6.024*	1.439	.000	3.200	8.848
	C'S	4.267*	1.466	.004	1.389	7.144
	D'S	1.749	1.751	.318	-1.688	5.186

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.101*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	2033.415	4	508.354	22.975	.000	.103	91.898
Error	17745.695	802	22.127				

Notes: The F tests the effect of Usual Grades in School. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.102*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Religious Affiliation (Recoded)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Catholic	5.082	.363	4.369	5.794
Protestant	4.996	.323	4.362	5.629
Born-again Christian	4.794	.396	4.017	5.570
Other	5.449	.476	4.514	6.384
No religion	6.397	.439	5.535	7.258

Table F.103*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Religious Affiliation (Recoded)	(J) Religious Affiliation (Recoded)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Catholic	Protestant	.086	.486	.860	-.868	1.040
	Born-again Christian	.288	.537	.592	-.766	1.342
	Other	-.367	.599	.540	-1.543	.809
	No religion	-1.315*	.570	.021	-2.434	-.197
Protestant	Catholic	-.086	.486	.860	-1.040	.868
	Born-again Christian	.202	.511	.692	-.800	1.205
	Other	-.453	.575	.431	-1.582	.676
	No religion	-1.401*	.545	.010	-2.471	-.332
Born-again Christian	Catholic	-.288	.537	.592	-1.342	.766
	Protestant	-.202	.511	.692	-1.205	.800
	Other	-.655	.619	.290	-1.871	.560
	No religion	-1.603*	.591	.007	-2.763	-.443
Other	Catholic	.367	.599	.540	-.809	1.543
	Protestant	.453	.575	.431	-.676	1.582
	Born-again Christian	.655	.619	.290	-.560	1.871
	No religion	-.948	.648	.144	-2.220	.323
No religion	Catholic	1.315*	.570	.021	.197	2.434
	Protestant	1.401*	.545	.010	.332	2.471
	Born-again Christians	1.603*	.591	.007	.443	2.763
	Other	.948	.648	.144	-.323	2.220

Notes: Based on estimated marginal means^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.104*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	4	55.623	2.292	.058	.011	9.166	.670
Error	800	24.273					

Notes: The F tests the effect of Religious Affiliation (Recode - 5 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.
 + Computed using alpha = .05

Table F.105*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No Religion	6.397	.439	5.536	7.258
Other & Catholic	5.216	.289	4.650	5.783
Born-again & Protestant	4.915	.250	4.424	5.405

Table F.106*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Religious Affiliation (Categories by Aggregate Religious Commitment)	(J) Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
No Religion	Other & Catholic	1.180*	.525	.025	.150	2.211
	Born-again & Protestant	1.482*	.505	.003	.491	2.473
Other & Catholic	No Religion	-1.180*	.525	.025	-2.211	-.150
	Born-again & Protestant	.302	.382	.430	-.448	1.051
Born-again & Protestant	No Religion	-1.482*	.505	.003	-2.473	-.491
	Other & Catholic	-.302	.382	.430	-1.051	.448

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.107*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	209.572	2	104.786	4.325	.014	.011	8.650
Error	19431.713	802	24.229				

The F tests the effect of Religious Affiliation (Categories by Aggregate Religious Commitment). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.108*Estimates – Dependent Variable: Aggregate Delinquency Scale*

Identify as Religious	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Not Religious	6.397	.438	5.536	7.257
Religious	5.044	.189	4.673	5.415

Table F.109*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale*

(I) Identify as Religious	(J) Identify as Religious	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Not Religious	Religious	1.353*	.477	.005	.416	2.290
Religious	Not Religious	-1.353*	.477	.005	-2.290	-.416

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.110*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	194.451	1	194.451	8.029	.005	.010	8.029
Error	19446.833	803	24.218				

Notes: The F tests the effect of Identify as Religious. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.111

Estimates – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior

Religious Affiliation (Recoded)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Catholic	3.473	.294	2.895	4.051
Protestant	3.103	.262	2.590	3.616
Born-again Christian	2.761	.321	2.132	3.391
Other	3.570	.386	2.812	4.328
No religion	4.437	.356	3.738	5.135

Table F.112

Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior

(I) Religious Affiliation (Recoded)	(J) Religious Affiliation (Recoded)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Catholic	Protestant	.370	.394	.348	-.403	1.143
	Born-again Christian	.712	.435	.103	-.143	1.566
	Other	-.097	.485	.841	-1.050	.856
	No religion	-.964*	.462	.037	-1.870	-.057
Protestant	Catholic	-.370	.394	.348	-1.143	.403
	Born-again Christian	.342	.414	.409	-.471	1.154
	Other	-.467	.466	.317	-1.382	.448
	No religion	-1.334*	.442	.003	-2.200	-.467
Born-again Christian	Catholic	-.712	.435	.103	-1.566	.143
	Protestant	-.342	.414	.409	-1.154	.471
	Other	-.809	.502	.107	-1.794	.176
	No religion	-1.675*	.479	.000	-2.615	-.735
Other	Catholic	.097	.485	.841	-.856	1.050
	Protestant	.467	.466	.317	-.448	1.382
	Born-again Christian	.809	.502	.107	-.176	1.794
	No religion	-.866	.525	.099	-1.897	.164
No religion	Catholic	.964*	.462	.037	.057	1.870
	Protestant	1.334*	.442	.003	.467	2.200
	Born-again Christian	1.675*	.479	.000	.735	2.615
	Other	.866	.525	.099	-.164	1.897

Notes: Based on estimated marginal means

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.113*Univariate Tests – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	223.179	4	55.795	3.500	.008	.017	.864
Error	12754.776	800	15.943				

Notes: The F tests the effect of Religious Affiliation (Recode - 5 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.114*Estimates – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior*

Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No Religion	4.437	.355	3.739	5.134
Other & Catholic	3.509	.234	3.049	3.968
Born-again & Protestant	2.966	.203	2.569	3.364

Table F.115

Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior

(I) Religious Affiliation (Categories by Aggregate Religious Commitment)	(J) Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
No Religion	Other & Catholic	.928*	.425	.029	.093	1.763
	Born-again & Protestant	1.470*	.409	.000	.667	2.273
Other & Catholic	No Religion	-.928*	.425	.029	-1.763	-.093
	Born-again & Protestant	.542	.309	.080	-.065	1.149
Born-again & Protestant	No Religion	-1.470*	.409	.000	-2.273	-.667
	Other & Catholic	-.542	.309	.080	-1.149	.065

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.116

Univariate Tests – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	211.670	2	105.835	6.649	.001	.016	.913
Error	12766.285	802	15.918				

The F tests the effect of Religious Affiliation (Categories by Aggregate Religious Commitment). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.117*Estimates – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior*

Identify as Religious	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Not Religious	4.437	.356	3.738	5.135
Religious	3.199	.153	2.898	3.500

Table F.118*Pairwise Comparisons – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior*

(I) Identify as Religious	(J) Identify as Religious	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Not Religious	Religious	1.238*	.388	.001	.477	1.998
Religious	Not Religious	-1.238*	.388	.001	-1.998	-.477

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.119***Univariate Tests – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	162.804	1	162.804	10.201	.001	.013	.891
Error	12815.151	803	15.959				

Notes: The F tests the effect of Identify as Religious. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.120

Tests of Between Subjects Effects – Dependent Variable: Aggregate Delinquency Scale without Sexual Behavior

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Corrected Model	153.089 ^a	3	51.030	3.171	.024	.012	9.513	.735
Intercept	6816.674	1	6816.674	423.575	.000	.345	423.575	1.000
Absolute Risk	114.512	1	114.512	7.116	.008	.009	7.116	.759
Relative Risk	23.552	1	23.552	1.463	.227	.002	1.463	.227
Absolute Risk *	2.038	1	2.038	.127	.722	.000	.127	.065
Relative Risk								
Error	12922.829	803	16.093					
Total	22413.000	807						
Corrected Total	13075.918	806						

^a. R Squared = .012 (Adjusted R Squared = .008)

^b. Computed using alpha = .05

Table F.121

Tests of Between Subjects Effects – Dependent Variable: Religious Commitment

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Corrected Model	199.68 ^a	3	66.559	6.77	.000	.025	20.297	.976
Intercept	14277.64	1	14277.643	1451.27	.000	.644	1451.271	1.000
Absolute Risk	168.32	1	168.317	17.11	.000	.021	17.109	.985
Relative Risk	30.65	1	30.646	3.12	.078	.004	3.115	.422
Absolute Risk *	.12	1	.123	.01	.911	.000	.013	.051
Relative Risk								
Error	7899.94	803	9.838					
Total	32627.00	807						
Corrected Total	8099.61	806						

^a. R Squared = .025 (Adjusted R Squared = .021)

^b. Computed using alpha = .05

Table F.122*Estimates – Dependent Variable: Aggregate Religious Commitment*

Absolute Risk (None > Some)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
NO	5.762	.221	5.328	6.196
YES	6.764	.128	6.513	7.014

Table F.123*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Absolute Risk (None > Some)	(J) Absolute Risk (None > Some)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
NO	YES	-1.001 [*]	.255	.000	-1.502	-.500
YES	NO	1.001 [*]	.255	.000	.500	1.502

Notes: Based on estimated marginal means

* . The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.124***Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	151.819	1	151.819	15.377	.000	.019	.975
Error	7947.794	805	9.873				

Notes: The F tests the effect of Absolute Risk (None > Some). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.125*Estimates – Dependent Variable: Aggregate Religious Commitment*

Relative Risk (Less > More)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
NO	6.642	.159	6.330	6.955
YES	6.388	.157	6.081	6.695

Table F.126*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Relative Risk (Less > More)	(J) Relative Risk (Less > More)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
NO	YES	.255	.223	.254	-.184	.693
YES	NO	-.255	.223	.254	-.693	.184

Notes: Based on estimated marginal means^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.127***Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	13.065	1	13.065	1.301	.254	.002	.207
Error	8086.548	805	10.045				

Notes: The F tests the effect of Relative Risk (Less > More). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.128*Estimates – Dependent Variable: Aggregate Religious Commitment*

Time Without Adult Supervision	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Less than 1 hour	5.952	.348	5.270	6.634
1-2 hours	6.836	.230	6.384	7.288
3-4 hours	6.587	.223	6.149	7.025
More than 4 hours	6.425	.173	6.085	6.765

Table F.129*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Time Without Adult Supervision	(J) Time Without Adult Supervision	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Less than 1 hour	1-2 hours	-.884*	.417	.034	-1.703	-.066
	3-4 hours	-.635	.413	.125	-1.446	.176
	More than 4 hours	-.473	.388	.223	-1.236	.289
1-2 hours	Less than 1 hour	.884*	.417	.034	.066	1.703
	3-4 hours	.249	.321	.438	-.381	.879
	More than 4 hours	.411	.288	.154	-.155	.977
3-4 hours	Less than 1 hour	.635	.413	.125	-.176	1.446
	1-2 hours	-.249	.321	.438	-.879	.381
	More than 4 hours	.162	.283	.567	-.393	.717
More than 4 hours	Less than 1 hour	.473	.388	.223	-.289	1.236
	1-2 hours	-.411	.288	.154	-.977	.155
	3-4 hours	-.162	.283	.567	-.717	.393

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.130*Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	49.536	3	16.512	1.647	.177	.006	.434
Error	8050.078	803	10.025				

Notes: The F tests the effect of Time Without Adult Supervision. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.131*Estimates – Dependent Variable: Aggregate Religious Commitment*

Ages 14-17	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
<=14	6.542	.277	5.997	7.087
15	6.554	.181	6.198	6.910
16	6.500	.210	6.087	6.913
>=17	6.418	.267	5.893	6.943

Table F.132*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Ages 14-17	(J) Ages 14-17	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
<=14	15	-.012	.331	.972	-.662	.639
	16	.042	.348	.904	-.641	.725
	>=17	.124	.385	.749	-.633	.880
15	<=14	.012	.331	.972	-.639	.662
	16	.054	.278	.847	-.491	.599
	>=17	.135	.323	.675	-.499	.769
16	<=14	-.042	.348	.904	-.725	.641
	15	-.054	.278	.847	-.599	.491
	>=17	.082	.340	.811	-.586	.749
>=17	<=14	-.124	.385	.749	-.880	.633
	15	-.135	.323	.675	-.769	.499
	16	-.082	.340	.811	-.749	.586

Notes: Based on estimated marginal means^a Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.133***Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	1.919	3	.640	.063	.979	.000	.061
Error	8097.694	803	10.084				

Notes: The F tests the effect of Ages. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a Computed using alpha = .05

Table F.134*Estimates – Dependent Variable: Aggregate Religious Commitment*

Ethnicity	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Caucasian/White	5.989	.163	5.668	6.310
Mexican, Central, or South American	6.244	.276	5.702	6.786
African-American/Black	7.482	.208	7.074	7.890
Other	6.591	.323	5.958	7.225

Table F.135*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Caucasian/White	Mexican, Central, or South American	-.255	.321	.427	-.885	.375
	African-American/Black	-1.493*	.264	.000	-2.012	-.974
	Other	-.602	.362	.096	-1.313	.108
Mexican, Central, or South American	Caucasian/White	.255	.321	.427	-.375	.885
	African-American/Black	-1.238*	.346	.000	-1.917	-.559
	Other	-.347	.425	.414	-1.181	.487
African-American/Black	Caucasian/White	1.493*	.264	.000	.974	2.012
	Mexican, Central, or South American	1.238*	.346	.000	.559	1.917
	Other	.891*	.384	.021	.137	1.644
Other	Caucasian/White	.602	.362	.096	-.108	1.313
	Mexican, Central, or South American	.347	.425	.414	-.487	1.181
	African-American/Black	-.891*	.384	.021	-1.644	-.137

Notes: Based on estimated marginal means^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.136*Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	319.823	3	106.608	11.004	.000	.039	.999
Error	7779.791	803	9.688				

Notes: The F tests the effect of Ethnicity. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.137*Estimates – Dependent Variable: Aggregate Religious Commitment*

“Do you get a free lunch?”	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No	6.481	.133	6.219	6.742
Yes	6.590	.205	6.187	6.993

Table F.13*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) “Do you get a free lunch?”	(J) “Do you get a free lunch?”	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
No	Yes	-.109	.245	.655	-.589	.371
Yes	No	.109	.245	.655	-.371	.589

Notes: Based on estimated marginal means^a Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.139***Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	2.011	1	2.011	.200	.655	.000	.073
Error	8097.603	805	10.059				

Notes: The F tests the effect of “Do you get a free lunch?” This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a Computed using alpha = .05

Table F.140*Estimates – Dependent Variable: Aggregate Religious Commitment*

Gender	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male	6.091	.174	5.750	6.432
Female	6.803	.144	6.520	7.086

Table F.141*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Gender	(J) Gender	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Male	Female	-.712*	.226	.002	-1.155	-.269
Female	Male	.712*	.226	.002	.269	1.155

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.142***Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	98.834	1	98.834	9.944	.002	.012	.883
Error	8000.779	805	9.939				

Notes: The F tests the effect of Gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.143*Estimates – Dependent Variable: Aggregate Religious Commitment*

Living Status (3 Cat)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Live w/ Both Parents	6.767	.160	6.452	7.081
Live w/ One Parent	6.170	.220	5.737	6.603
Other Living Arrangement	6.379	.218	5.952	6.807

Table F.144*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Living Status (3 Cat)	(J) Living Status (3 Cat)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Live w/ Both Parents	Live w/ One Parent	.597*	.272	.029	.062	1.132
	Other Living Arrangement	.388	.270	.152	-.143	.918
Live w/ One Parent	Live w/ Both Parents	-.597*	.272	.029	-1.132	-.062
	Other Living Arrangement	-.209	.310	.500	-.817	.399
Other Living Arrangement	Live w/ Both Parents	-.388	.270	.152	-.918	.143
	Live w/ One Parent	.209	.310	.500	-.399	.817

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.145*Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	53.125	2	26.563	2.654	.071	.007	.528
Error	8046.488	804	10.008				

Notes: The F tests the effect of Living Status (3 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.146*Estimates – Dependent Variable: Aggregate Religious Commitment*

Average Parental Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Some High School	5.740	.448	4.861	6.619
In Between Some/Graduated High School	6.250	.528	5.214	7.286
Graduated High School	6.000	.268	5.475	6.525
In Between Graduated/Some High School/College	6.213	.327	5.572	6.854
Some College	6.887	.259	6.379	7.394
In Between Some/Graduated College	7.374	.332	6.722	8.025
Graduated College	6.930	.242	6.454	7.405

Table F.147*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Average Parental Education	(J) Average Parental Education	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Some High School	In Between Some/Graduated High School	-.510	.692	.461	-1.869	.849
	Graduated High School	-.260	.522	.618	-1.284	.764
	In Between Graduated/Some High School/College	-.473	.554	.394	-1.561	.615
	Some College	-1.147*	.517	.027	-2.162	-.132
	In Between Some/Graduated College	-1.634*	.557	.003	-2.728	-.539
	Graduated College	-1.190*	.509	.020	-2.189	-.190
In Between Some/Graduated High School	Some High School	.510	.692	.461	-.849	1.869
	Graduated High School	.250	.592	.673	-.912	1.412
	In Between Graduated/Some High School/College	.037	.621	.952	-1.181	1.256
	Some College	-.637	.588	.279	-1.790	.517
	In Between Some/Graduated College	-1.124	.623	.072	-2.347	.100
	Graduated College	-.680	.581	.242	-1.820	.460
Graduated High School	Some High School	.260	.522	.618	-.764	1.284
	In Between Some/Graduated High School	-.250	.592	.673	-1.412	.912
	In Between Graduated/Some High School/College	-.213	.422	.614	-1.042	.616
	Some College	-.887*	.372	.017	-1.617	-.156
	In Between Some/Graduated College	-1.374*	.426	.001	-2.211	-.537
	Graduated College	-.930*	.361	.010	-1.638	-.221
In Between Graduated/Some High School/College	Some High School	.473	.554	.394	-.615	1.561
	In Between Some/Graduated High School	-.037	.621	.952	-1.256	1.181
	Graduated High School	.213	.422	.614	-.616	1.042
	Some College	-.674	.416	.106	-1.492	.144
	In Between Some/Graduated College	-1.161*	.466	.013	-2.075	-.247
	Graduated College	-.717	.407	.078	-1.515	.081

Some College	Some High School	1.147*	.517	.027	.132	2.162
	In Between Some/Graduated High School	.637	.588	.279	-.517	1.790
	Graduated High School	.887*	.372	.017	.156	1.617
	In Between Graduated/Some High School/College	.674	.416	.106	-.144	1.492
	In Between Some/Graduated College	-.487	.421	.247	-1.313	.339
	Graduated College	-.043	.354	.903	-.739	.652
In Between Some/Graduated College	Some High School	1.634*	.557	.003	.539	2.728
	In Between Some/Graduated High School	1.124	.623	.072	-.100	2.347
	Graduated High School	1.374*	.426	.001	.537	2.211
	In Between Graduated/Some High School/College	1.161*	.466	.013	.247	2.075
	Some College	.487	.421	.247	-.339	1.313
	Graduated College	.444	.411	.280	-.363	1.250
Graduated College	Some High School	1.190*	.509	.020	.190	2.189
	In Between Some/Graduated High School	.680	.581	.242	-.460	1.820
	Graduated High School	.930*	.361	.010	.221	1.638
	In Between Graduated/Some High School/College	.717	.407	.078	-.081	1.515
	Some College	.043	.354	.903	-.652	.739
	In Between Some/Graduated College	-.444	.411	.280	-1.250	.363

Notes: Based on estimated marginal means

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.148*Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	191.225	6	31.871	3.179	.004	.026	.925
Error	7267.643	725	10.024				

Notes: The F tests the effect of Average Parental Education. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.149*Estimates – Dependent Variable: Aggregate Religious Commitment*

Usual Grades in School	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
A'S	7.025	.204	6.624	7.427
B'S	6.516	.161	6.199	6.833
C'S	6.068	.247	5.583	6.554
D'S	4.333	.685	2.989	5.678
F'S	6.091	.947	4.233	7.949

Table F.150*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Usual Grades in School	(J) Usual Grades in School	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
A'S	B'S	.510	.260	.051	-.002	1.021
	C'S	.957*	.321	.003	.327	1.587
	D'S	2.692*	.715	.000	1.289	4.095
	F'S	.935	.968	.335	-.966	2.835
B'S	A'S	-.510	.260	.051	-1.021	.002
	C'S	.448	.295	.130	-.132	1.027
	D'S	2.183*	.704	.002	.801	3.564
	F'S	.425	.960	.658	-1.460	2.310
C'S	A'S	-.957*	.321	.003	-1.587	-.327
	B'S	-.448	.295	.130	-1.027	.132
	D'S	1.735*	.728	.017	.305	3.165
	F'S	-.023	.978	.982	-1.943	1.898
D'S	A'S	-2.692*	.715	.000	-4.095	-1.289
	B'S	-2.183*	.704	.002	-3.564	-.801
	C'S	-1.735*	.728	.017	-3.165	-.305
	F'S	-1.758	1.168	.133	-4.051	.536
F'S	A'S	-.935	.968	.335	-2.835	.966
	B'S	-.425	.960	.658	-2.310	1.460
	C'S	.023	.978	.982	-1.898	1.943
	D'S	1.758	1.168	.133	-.536	4.051

Notes: Based on estimated marginal means

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

*. The mean difference is significant at the .05 level.

Table F.151*Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	195.537	4	48.884	4.960	.001	.024	.962
Error	7904.076	802	9.855				

Notes: The F tests the effect of Usual Grades in School. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.152*Estimates – Dependent Variable: Aggregate Religious Commitment*

Religious Affiliation (Recoded)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Catholic	6.272	.202	5.874	6.669
Protestant	7.588	.180	7.235	7.941
Born-again Christian	7.755	.221	7.322	8.188
Other	6.916	.265	6.395	7.437
No religion	3.040	.245	2.560	3.520

Table F.153*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Religious Affiliation (Recoded)	(J) Religious Affiliation (Recoded)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Catholic	Protestant	-1.316*	.271	.000	-1.848	-.785
	Born-again Christian	-1.483*	.299	.000	-2.071	-.896
	Other	-.644	.334	.054	-1.299	.011
	No religion	3.232*	.317	.000	2.609	3.855
Protestant	Catholic	1.316*	.271	.000	.785	1.848
	Born-again Christian	-.167	.285	.558	-.725	.392
	Other	.672*	.321	.036	.043	1.301
	No religion	4.548*	.304	.000	3.952	5.144
Born-again Christian	Catholic	1.483*	.299	.000	.896	2.071
	Protestant	.167	.285	.558	-.392	.725
	Other	.839*	.345	.015	.162	1.516
	No religion	4.715*	.329	.000	4.069	5.362
Other	Catholic	.644	.334	.054	-.011	1.299
	Protestant	-.672*	.321	.036	-1.301	-.043
	Born-again Christian	-.839*	.345	.015	-1.516	-.162
	No religion	3.876*	.361	.000	3.168	4.585
No religion	Catholic	-3.232*	.317	.000	-3.855	-2.609
	Protestant	-4.548*	.304	.000	-5.144	-3.952
	Born-again Christian	-4.715*	.329	.000	-5.362	-4.069
	Other	-3.876*	.361	.000	-4.585	-3.168

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.154*Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	2056.401	4	514.100	68.199	.000	.254	1.000
Error	6030.588	800	7.538				

The F tests the effect of Religious Affiliation (Recode - 5 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.155*Estimates – Dependent Variable: Aggregate Religious Commitment*

Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No Religion	3.040	.245	2.559	3.520
Other & Catholic	6.509	.161	6.192	6.825
Born-again & Protestant	7.655	.140	7.381	7.929

Table F.156*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Religious Affiliation (Categories by Aggregate Religious Commitment)	(J) Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
No Religion	Other & Catholic	-3.469*	.293	.000	-4.044	-2.893
	Born-again & Protestant	-4.615*	.282	.000	-5.168	-4.062
Other & Catholic	No Religion	3.469*	.293	.000	2.893	4.044
	Born-again & Protestant	-1.146*	.213	.000	-1.565	-.728
Born-again & Protestant	No Religion	4.615*	.282	.000	4.062	5.168
	Other & Catholic	1.146*	.213	.000	.728	1.565

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.157***Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	2025.737	2	1012.869	134.019	.000	.250	1.000
Error	6061.252	802	7.558				

Notes: The F tests the effect of Religious Affiliation (Categories by Aggregate Religious Commitment). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.158*Estimates – Dependent Variable: Aggregate Religious Commitment*

Identify as Religious	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Not Religious	3.040	.249	2.551	3.529
Religious	7.163	.107	6.953	7.374

Table F.159*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Identify as Religious	(J) Identify as Religious	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Not Religious	Religious	-4.124*	.271	.000	-4.656	-3.591
Religious	Not Religious	4.124*	.271	.000	3.591	4.656

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.160***Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	1807.333	1	1807.333	231.110	.000	.223	1.000
Error	6279.656	803	7.820				

Notes: The F tests the effect of Identify as Religious. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.161*Estimates – Dependent Variable: Aggregate Religious Commitment*

Religious Affiliation (Recoded)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Catholic	2.560	.082	2.399	2.721
Protestant	2.893	.073	2.750	3.036
Born-again Christian	3.000	.089	2.825	3.175
Other	2.561	.108	2.350	2.772
No religion	.889	.099	.694	1.083

Table F.162*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Religious Affiliation (Recoded)	(J) Religious Affiliation (Recoded)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Catholic	Protestant	-.333*	.110	.002	-.548	-.118
	Born-again Christian	-.440*	.121	.000	-.678	-.202
	Other	-.001	.135	.994	-.267	.265
	No religion	1.671*	.129	.000	1.418	1.923
Protestant	Catholic	.333*	.110	.002	.118	.548
	Born-again Christian	-.107	.115	.352	-.334	.119
	Other	.332*	.130	.011	.077	.587
	No religion	2.004*	.123	.000	1.762	2.245
Born-again Christian	Catholic	.440*	.121	.000	.202	.678
	Protestant	.107	.115	.352	-.119	.334
	Other	.439*	.140	.002	.165	.714
	No religion	2.111*	.133	.000	1.849	2.373
Other	Catholic	.001	.135	.994	-.265	.267
	Protestant	-.332*	.130	.011	-.587	-.077
	Born-again Christian	-.439*	.140	.002	-.714	-.165
	No religion	1.672*	.146	.000	1.385	1.959
No religion	Catholic	-1.671*	.129	.000	-1.923	-1.418
	Protestant	-2.004*	.123	.000	-2.245	-1.762
	Born-again Christian	-2.111*	.133	.000	-2.373	-1.849
	Other	-1.672*	.146	.000	-1.959	-1.385

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.163*Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	402.452	4	100.613	81.266	.000	.289	1.000
Error	990.460	800	1.238				

Notes: The F tests the effect of Religious Affiliation (Recode - 5 Cat). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.164*Estimates – Dependent Variable: Aggregate Religious Commitment*

Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No Religion	.889	.099	.694	1.083
Other & Catholic	2.560	.065	2.432	2.688
Born-again & Protestant	2.936	.056	2.825	3.046

Table F.165*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Religious Affiliation (Categories by Aggregate Religious Commitment)	(J) Religious Affiliation (Categories by Aggregate Religious Commitment)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
No Religion	Other & Catholic	-1.671*	.119	.000	-1.904	-1.438
	Born-again & Protestant	-2.047*	.114	.000	-2.270	-1.823
Other & Catholic	No Religion	1.671*	.119	.000	1.438	1.904
	Born-again & Protestant	-.375*	.086	.000	-.545	-.206
Born-again & Protestant	No Religion	2.047*	.114	.000	1.823	2.270
	Other & Catholic	.375*	.086	.000	.206	.545

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table F.166*Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	401.381	2	200.690	162.328	.000	.288	1.000
Error	991.531	802	1.236				

Notes: The F tests the effect of Religious Affiliation (Categories by Aggregate Religious Commitment). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^a. Computed using alpha = .05

Table F.167*Estimates – Dependent Variable: Aggregate Religious Commitment*

Identify as Religious	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Not Religious	.889	.100	.692	1.085
Religious	2.775	.043	2.690	2.859

Table F.168*Pairwise Comparisons – Dependent Variable: Aggregate Religious Commitment*

(I) Identify as Religious	(J) Identify as Religious	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Not Religious	Religious	-1.886*	.109	.000	-2.100	-1.672
Religious	Not Religious	1.886*	.109	.000	1.672	2.100

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

^a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).**Table F.169***Univariate Tests – Dependent Variable: Aggregate Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
Contrast	377.943	1	377.943	299.012	.000	.271	1.000
Error	1014.969	803	1.264				

Notes: The F tests the effect of Identify as Religious. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.^a. Computed using alpha = .05

Table F.170*Estimates – Dependent Variable: Degree of Religious Commitment*

Endorsing the Absolute or Relative Statement	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Endorse Neither Statement	4.895	.262	4.380	5.410
Endorse Only Absolute Statement	6.063	.197	5.677	6.449
Endorse Both Statements	5.547	.167	5.218	5.876
Endorse Only Relative Statement	4.441	.408	3.639	5.242

Table F.171*Univariate Tests – Dependent Variable: Degree of Religious Commitment*

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^a
Contrast	199.678	3	66.559	6.766	.000	.025	20.297	.976
Error	7899.935	803	9.838					

Notes: The F tests the effect of Endorsing the Absolute or Relative statement. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table F.172

Pairwise Comparisons – Dependent Variable: Degree of Religious Commitment

(I) Endorsing the Absolute or Relative Statement	(J) Endorsing the Absolute or Relative Statement	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Endorse Neither Statement	Endorse Only Absolute Statement	-1.168*	.328	.000	-1.812	-.524
	Endorse Both Statements	-.652*	.311	.036	-1.263	-.041
	Endorse Only Relative Statement	.454	.485	.349	-.498	1.407
Endorse Only Absolute Statement	Endorse Neither Statement	1.168*	.328	.000	.524	1.812
	Endorse Both Statements	.516*	.258	.046	.009	1.023
	Endorse Only Relative Statement	1.622*	.453	.000	.733	2.512
Endorse Both Statements	Endorse Neither Statement	.652*	.311	.036	.041	1.263
	Endorse Only Absolute Statement	-.516*	.258	.046	-1.023	-.009
	Endorse Only Relative Statement	1.106*	.441	.012	.240	1.973
Endorse Only Relative Statement	Endorse Neither Statement	-.454	.485	.349	-1.407	.498
	Endorse Only Absolute Statement	-1.622*	.453	.000	-2.512	-.733
	Endorse Both Statements	-1.106*	.441	.012	-1.973	-.240

Notes: Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

APPENDIX G

Factor Analysis

Table G.1
Total Variance Explained – Regression Variables

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.177	13.608	13.608	2.177	13.608	13.608	1.951	12.195	12.195
2	1.928	12.051	25.660	1.928	12.051	25.660	1.751	10.942	23.137
3	1.673	10.456	36.115	1.673	10.456	36.115	1.656	10.351	33.488
4	1.311	8.196	44.312	1.311	8.196	44.312	1.333	8.332	41.820
5	1.204	7.522	51.834	1.204	7.522	51.834	1.322	8.261	50.082
6	1.118	6.990	58.824	1.118	6.990	58.824	1.263	7.894	57.976
7	1.082	6.760	65.585	1.082	6.760	65.585	1.217	7.609	65.585
8	.952	5.951	71.535						
9	.882	5.510	77.045						
10	.772	4.825	81.870						
11	.719	4.493	86.363						
12	.685	4.283	90.646						
13	.617	3.859	94.505						
14	.563	3.519	98.024						
15	.172	1.074	99.097						
16	.144	.903	100.000						

Notes: Extraction Method – Principal Component Analysis.

Table G.2
Component Matrix^a – Regression Variables

	Component						
	1	2	3	4	5	6	7
Ethnicity – African-American	.704	-.457					
Religion - Catholic	-.702		.419				
Ethnicity – Hispanic	-.605		.430				
Ethnicity – Caucasian		.716	-.431				
Usual Grades in School		-.481	-.421				
Religion – Born-Again Christian	.407	-.443		.415			
Living with Both Parents							
Religious Commitment	.400		.504				
Frequency of After School Activities			.450				
Index of Peer Relations			.431				
Religion – Protestant	.415			-.712			
Relative Risk (Less > More)				.450	.551	-.417	
Absolute Risk (None > Some)					.461		
Age					.452		
Time Without Adult Supervision					.426	.545	
Religion – Other Religion				.516			.670

Notes: Extraction Method – Principal Component Analysis.

Values below .40 were suppressed.

^a. 7 components extracted.

Table G.3*Rotated Component Matrix^a – Regression Variables*

	Component						
	1	2	3	4	5	6	7
Ethnicity – African-American	.845						
Religion - Catholic	.837						
Ethnicity – Hispanic		-.852					
Ethnicity – Caucasian		.794					
Usual Grades in School			.688				
Religion – Born-Again Christian			.646				
Living with Both Parents			-.632				
Religious Commitment		.455	.478				
Frequency of After School Activities				.791			
Index of Peer Relations				-.610			
Religion – Protestant					-.760		
Relative Risk (Less > More)					.595		
Absolute Risk (None > Some)						.824	
Age						.736	
Time Without Adult Supervision							.911
Religion – Other Religion	-.456				.542		-.571

Notes: Extraction Method – Principal Component Analysis.

Rotation Method – Varimax with Kaiser Normalization.

Values below .40 were suppressed.

^a. Rotation converged in 8 iterations.

APPENDIX H

Main Variable Regressions

Table H.1

Regression: Aggregate Religious Commitment Predicting Aggregate Delinquency

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	7.37	0.44	---	0.00	6.50	8.24
Absolute Statement Endorsement	-1.14	0.41	-0.10	0.01	-1.95	-0.34
Relative Statement Endorsement	0.70	0.35	0.07	0.05	0.01	1.39
Aggregate Religious Commitment	-0.29	0.05	-0.19	0.00	-0.40	-0.18

Notes: F (3,803) = 14.73, p < .00; (R²=.05)

Table H.2

Regression: Aggregate Religious Commitment Predicting Aggregate Delinquency without Sexual Behavior

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	5.06	0.36	---	0.00	4.35	5.77
Absolute Statement Endorsement	-0.70	0.34	-0.08	0.04	-1.36	-0.04
Relative Statement Endorsement	0.38	0.29	0.05	0.19	-0.19	0.94
Aggregate Religious Commitment	-0.24	0.04	-0.19	0.00	-0.33	-0.15

Notes: F (3,803) = 13.03, p < .00; (R²=.05)

Table H.3*Regression: Religious Importance Predicting Aggregate Delinquency*

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	8.19	0.46	---	0.00	7.28	9.09
Absolute Statement Endorsement	-1.11	0.40	-0.10	0.01	-1.90	-0.32
Relative Statement Endorsement	0.57	0.35	0.06	0.10	-0.12	1.25
Importance of Religion	-0.96	0.13	-0.26	0.00	-1.21	-0.71

Notes: F (3,803) = 23.95, p < .00; (R²=.08)**Table H.4***Regression: Religious Importance Predicting Aggregate Delinquency without Sexual Behavior*

	<i>B</i>	<i>SE</i>	β	p-value	95 % Confidence	
					Lower	Upper
[Constant]	5.81	0.37	---	0.00	5.08	6.55
Absolute Statement Endorsement	-0.66	0.33	-0.07	0.05	-1.30	-0.01
Relative Statement Endorsement	0.25	0.28	0.03	0.37	-0.30	0.81
Importance of Religion	-0.83	0.10	-0.27	0.00	-1.03	-0.62

Notes: F (3,803) = 24.30, p < .00; (R²=.08)

Table H.5*Regression: Five Predictors with Aggregate Delinquency (Dependent)*

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	-1.60	2.76	---	0.56	-7.02	3.81
Absolute Statement Endorsement	-1.17	0.41	-0.10	0.00	-1.97	-0.37
Relative Statement Endorsement	0.70	0.35	0.07	0.05	0.01	1.39
Aggregate Religious Commitment	-0.29	0.05	-0.19	0.00	-0.40	-0.19
Age	0.57	0.18	0.11	0.00	0.23	0.92
Gender	0.22	0.35	0.02	0.53	-0.46	0.90

Notes: $F(5,801) = 11.18, p < .00; (R^2=.05)$ **Table H.6***Regression: Six Predictors with Aggregate Delinquency (Dependent)*

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	-2.50	2.72	---	0.36	-7.84	2.84
Absolute Statement Endorsement	-1.16	0.40	-0.10	0.00	-1.95	-0.37
Relative Statement Endorsement	0.70	0.35	0.07	0.04	0.02	1.38
Aggregate Religious Commitment	-0.29	0.05	-0.19	0.00	-0.40	-0.19
Age	0.47	0.18	0.09	0.01	0.12	0.81
Gender	0.28	0.34	0.03	0.41	-0.39	0.95
Time Without Adult Supervision	0.85	0.16	0.18	0.00	0.53	1.17

Notes: $F(6,800) = 14.16, p < .00; (R^2=.10)$

Table H.7*Regression: Eight Predictors with Aggregate Delinquency (Dependent)*

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	-2.56	2.73	---	0.35	-7.91	2.79
Absolute Statement Endorsement	-1.17	0.40	-0.10	0.00	-1.95	-0.38
Relative Statement Endorsement	0.71	0.35	0.07	0.04	0.03	1.38
Aggregate Religious Commitment	-0.28	0.05	-0.18	0.00	-0.39	-0.18
Age	0.46	0.18	0.09	0.01	0.12	0.81
Gender	0.30	0.34	0.03	0.38	-0.37	0.97
Time Without Adult Supervision	0.88	0.16	0.18	0.00	0.56	1.20
Ethnicity – Hispanic	0.37	0.48	0.03	0.44	-0.56	1.30
Ethnicity – African-American	-0.39	0.40	-0.04	0.32	-1.17	0.39

Notes: $F(8,798) = 10.89$, $p < .00$; ($R^2 = .10$)

Table H.8*Regression Descriptive Statistics: Eight Predictors with Aggregate Delinquency (Dependent)*

	Mean	Std. Deviation	N
Absolute Statement Endorsement	5.27	4.95	807
Relative Statement Endorsement	0.75	0.43	807
Aggregate Religious Commitment	0.51	0.50	807
Age	5.51	3.17	807
Gender	15.47	0.96	807
Time Without Adult Supervision	0.59	0.49	807
Ethnicity – Hispanic	2.97	1.03	807
Ethnicity – African-American	0.16	0.36	807
Absolute Statement Endorsement	0.28	0.45	807

Table H.9*Regression Collinearity Diagnostics: Eight Predictors for Aggregate Delinquency (Dependent)*

Dimension	Eigenvalue	Condition Index	Variance Proportions								
			(Constant)	Absolute Risk (None > Some)	Relative Risk (Less > More)	Religious Commitment	Age	Gender	Time Without Adult Supervision	Ethnicity – Hispanic	Ethnicity – African-American
1	6.18	1.00	.00	.00	.01	.00	.00	.01	.00	.00	.01
2	1.00	2.48	.00	.00	.00	.00	.00	.00	.00	.51	.21
3	.58	3.26	.00	.02	.29	.00	.00	.02	.00	.26	.38
4	.45	3.71	.00	.00	.29	.01	.00	.29	.00	.18	.33
5	.32	4.37	.00	.02	.27	.08	.00	.64	.02	.01	.03
6	.20	5.55	.00	.31	.00	.34	.00	.01	.15	.01	.00
7	.19	5.68	.00	.61	.13	.51	.00	.00	.00	.00	.03
8	.06	9.96	.01	.04	.01	.05	.01	.03	.82	.01	.00
9	.00	56.95	.98	.00	.00	.00	.98	.00	.00	.00	.00

Table H.10

Regression: Five Predictors with Aggregate Delinquency without the Sexual Behavior Item (Dependent)

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	1.09	2.26	---	0.63	-3.35	5.52
Absolute Statement Endorsement	-0.72	0.34	-0.08	0.03	-1.37	-0.06
Relative Statement Endorsement	0.38	0.29	0.05	0.19	-0.18	0.95
Aggregate Religious Commitment	-0.24	0.05	-0.19	0.00	-0.33	-0.15
Age	0.25	0.14	0.06	0.08	-0.03	0.54
Gender	0.17	0.29	0.02	0.54	-0.39	0.73

Notes: $F(5,801) = 8.34, p < .00; (R^2=.05)$

Table H.11

Regression: Six Predictors with Aggregate Delinquency without the Sexual Behavior Item (Dependent)

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	0.47	2.24	---	0.84	-3.93	4.86
Absolute Statement Endorsement	-0.71	0.33	-0.08	0.03	-1.36	-0.06
Relative Statement Endorsement	0.38	0.29	0.05	0.18	-0.18	0.94
Aggregate Religious Commitment	-0.24	0.04	-0.19	0.00	-0.33	-0.16
Age	0.18	0.14	0.04	0.22	-0.11	0.46
Gender	0.22	0.28	0.03	0.45	-0.34	0.77
Time Without Adult Supervision	0.59	0.13	0.15	0.00	0.32	0.85

Notes: $F(6,800) = 10.46, p < .00; (R^2=.07)$

Table H.12

Regression: Eight Predictors with Aggregate Delinquency and without the Sexual Behavior Item (Dependent)

	<i>B</i>	<i>SE</i>	β	p-value	95% Confidence	
					Lower	Upper
[Constant]	0.46	2.23		0.84	-3.93	4.84
Absolute Statement Endorsement	-0.72	0.33	-0.08	0.03	-1.37	-0.08
Relative Statement Endorsement	0.39	0.28	0.05	0.18	-0.17	0.94
Aggregate Religious Commitment	-0.22	0.05	-0.17	0.00	-0.31	-0.13
Age	0.17	0.14	0.04	0.24	-0.11	0.45
Gender	0.26	0.28	0.03	0.36	-0.29	0.81
Time Without Adult Supervision	0.63	0.13	0.16	0.00	0.37	0.90
Ethnicity – Hispanic	0.44	0.39	0.04	0.26	-0.33	1.20
Ethnicity – African-American	-0.83	0.32	-0.09	0.01	-1.46	-0.19

Notes: $F(8,798) = 9.17, p < .00; (R^2=.08)$

Table H.13

Regression Collinearity Diagnostics: Eight Predictors for Aggregate Delinquency without the Sexual Behavior Item (Dependent)

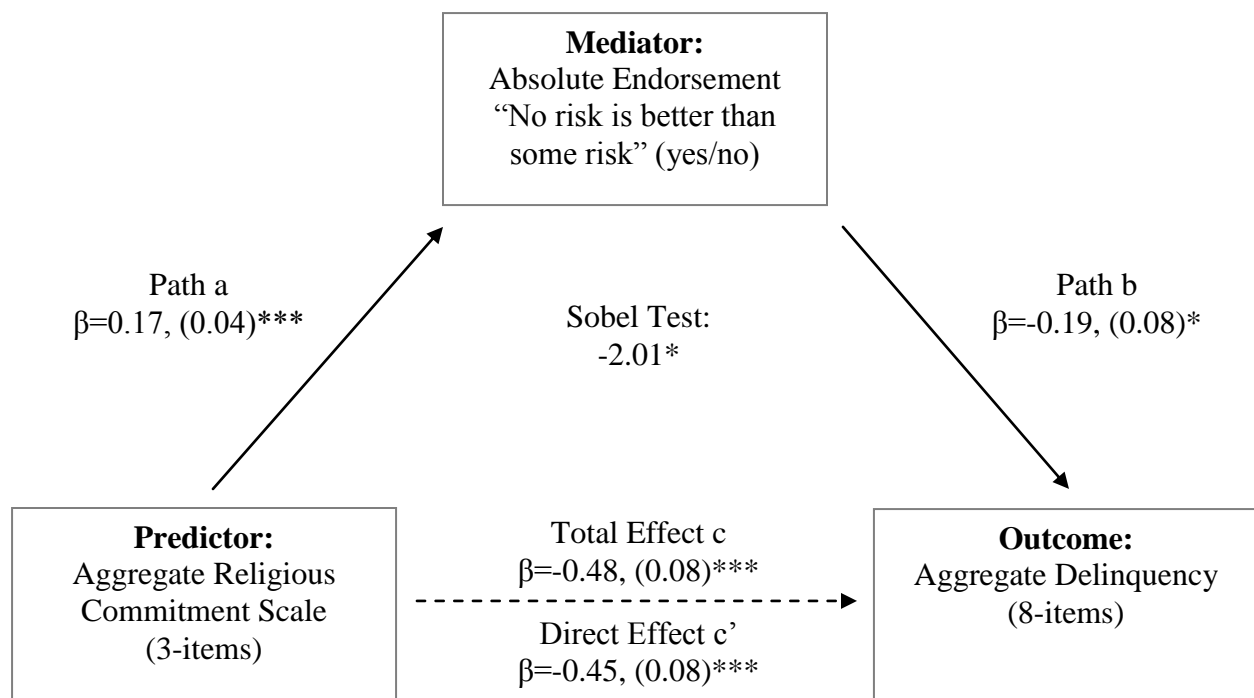
Dimension	Eigenvalue	Condition Index	Variance Proportions								
			(Constant)	Absolute Risk (None > Some)	Relative Risk (Less > More)	Religious Commitment	Age	Gender	Time Without Adult Supervision	Ethnicity – Hispanic	Ethnicity – African-American
1	6.183	1.000	.00	.00	.01	.00	.00	.01	.00	.00	.01
2	1.004	2.482	.00	.00	.00	.00	.00	.00	.00	.51	.21
3	.582	3.258	.00	.02	.29	.00	.00	.02	.00	.26	.38
4	.450	3.708	.00	.00	.29	.01	.00	.29	.00	.18	.33
5	.324	4.370	.00	.02	.27	.08	.00	.64	.02	.01	.03
6	.201	5.546	.00	.31	.00	.34	.00	.01	.15	.01	.00
7	.192	5.677	.00	.61	.13	.51	.00	.00	.00	.00	.03
8	.062	9.956	.01	.04	.01	.05	.01	.03	.82	.01	.00
9	.002	56.948	.98	.00	.00	.00	.98	.00	.00	.00	.00

APPENDIX I

Mediation

Figure I.1

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Aggregate Delinquency by Absolute Endorsement

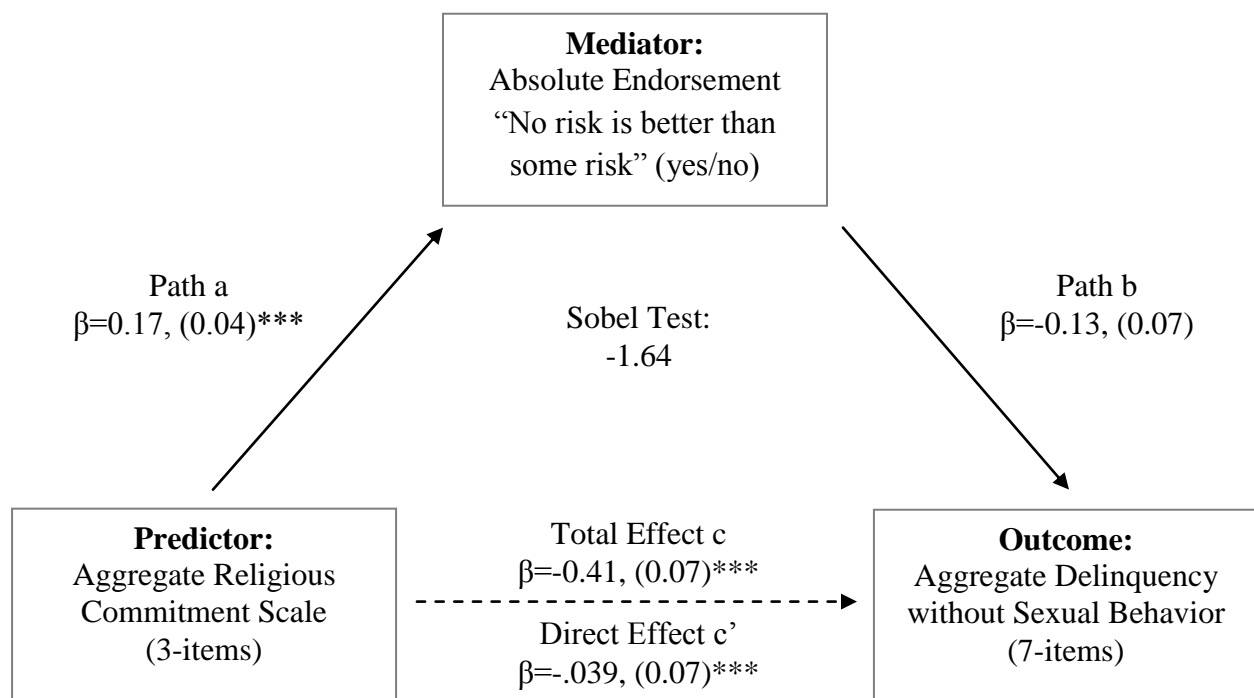


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.2

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Aggregate Delinquency (without Sexual Behavior) by Absolute Endorsement

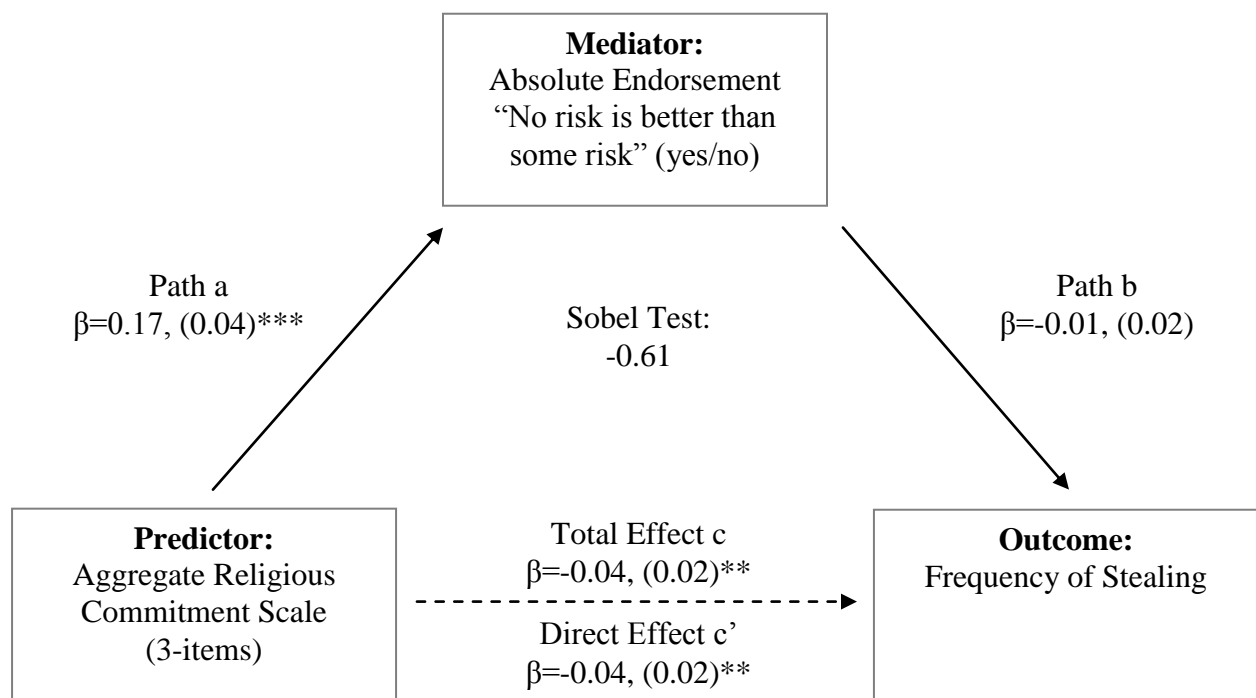


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.3

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Stealing by Absolute Endorsement

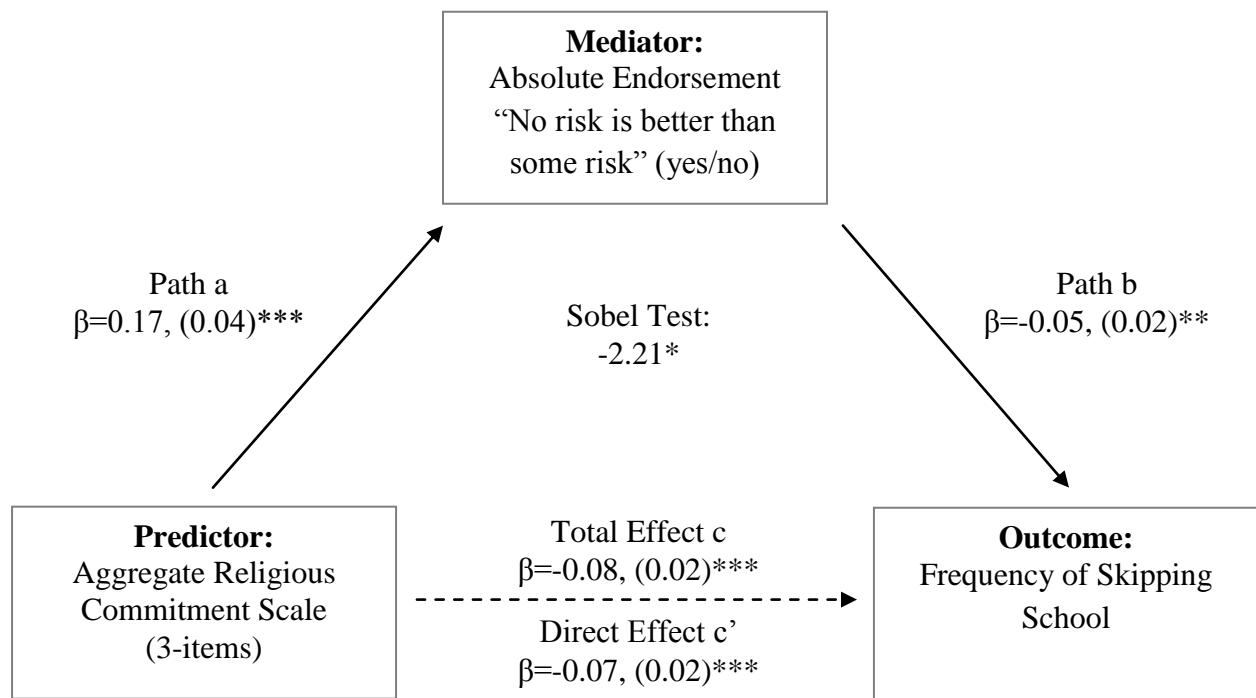


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.4

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Skipping School by Absolute Endorsement

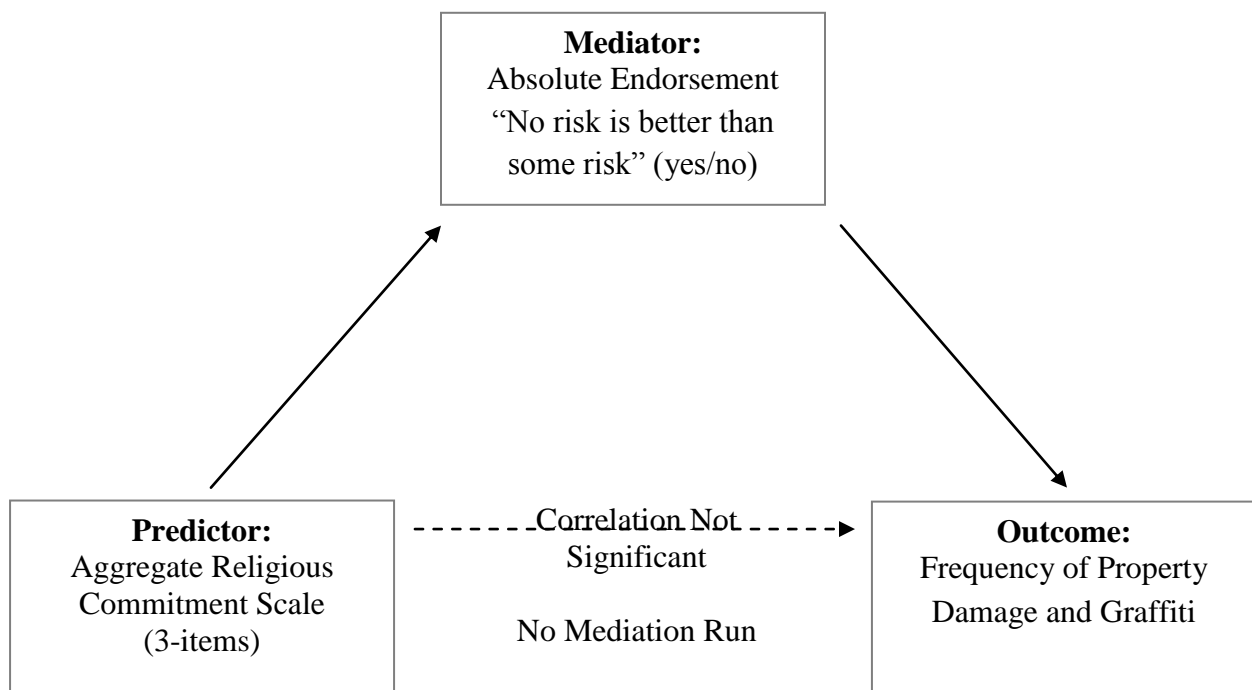


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.5

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Property Damage/Graffiti by Absolute Endorsement

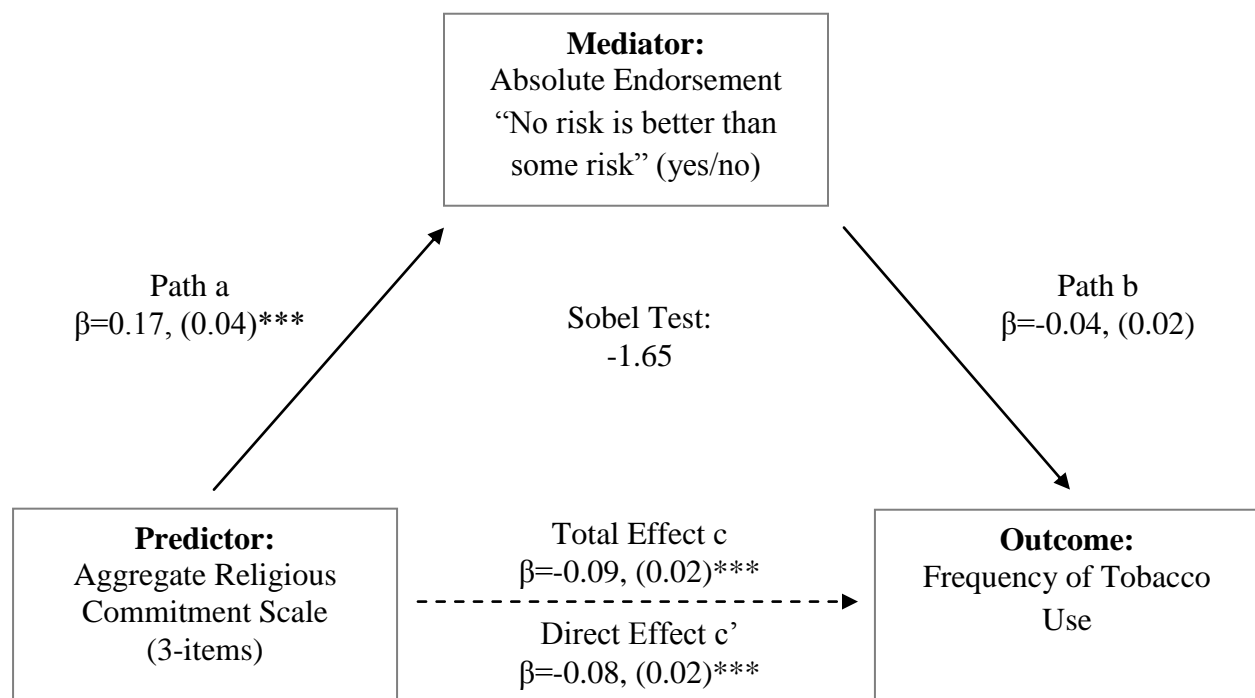


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006); Correlation was $r_p(807) = -0.03$, $p < 0.38$

Figure I.6

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Tobacco Use by Absolute Endorsement

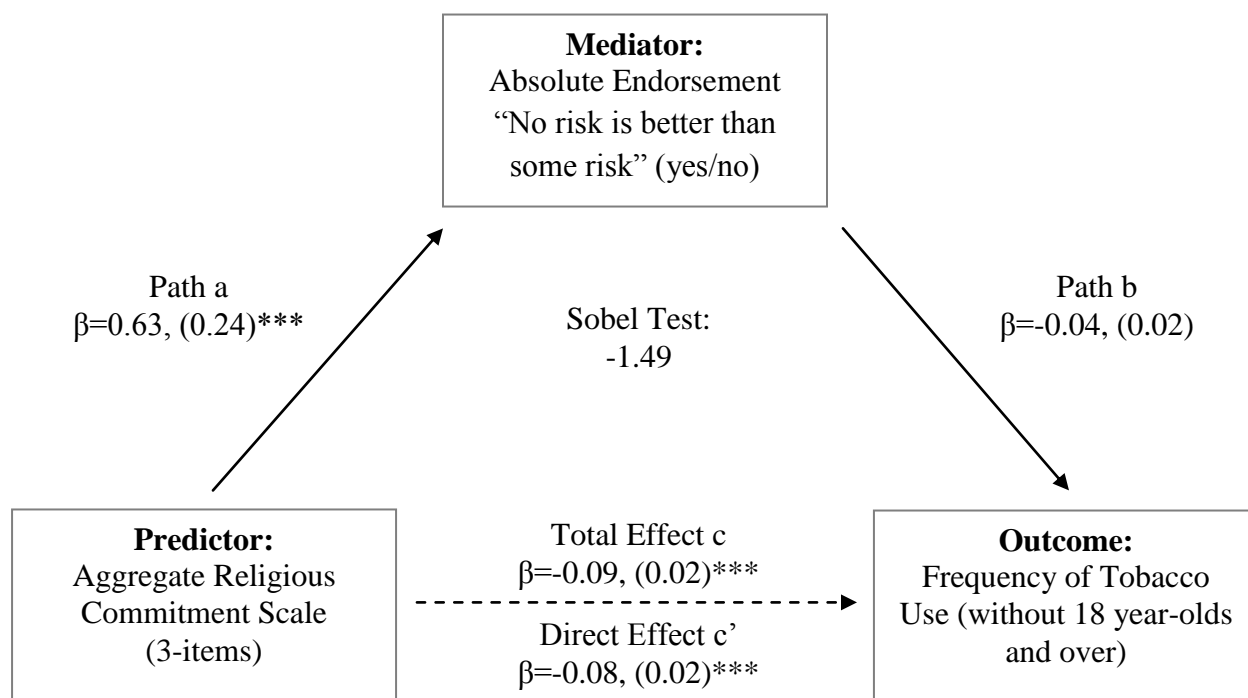


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.7

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Underage Tobacco Use by Absolute Endorsement

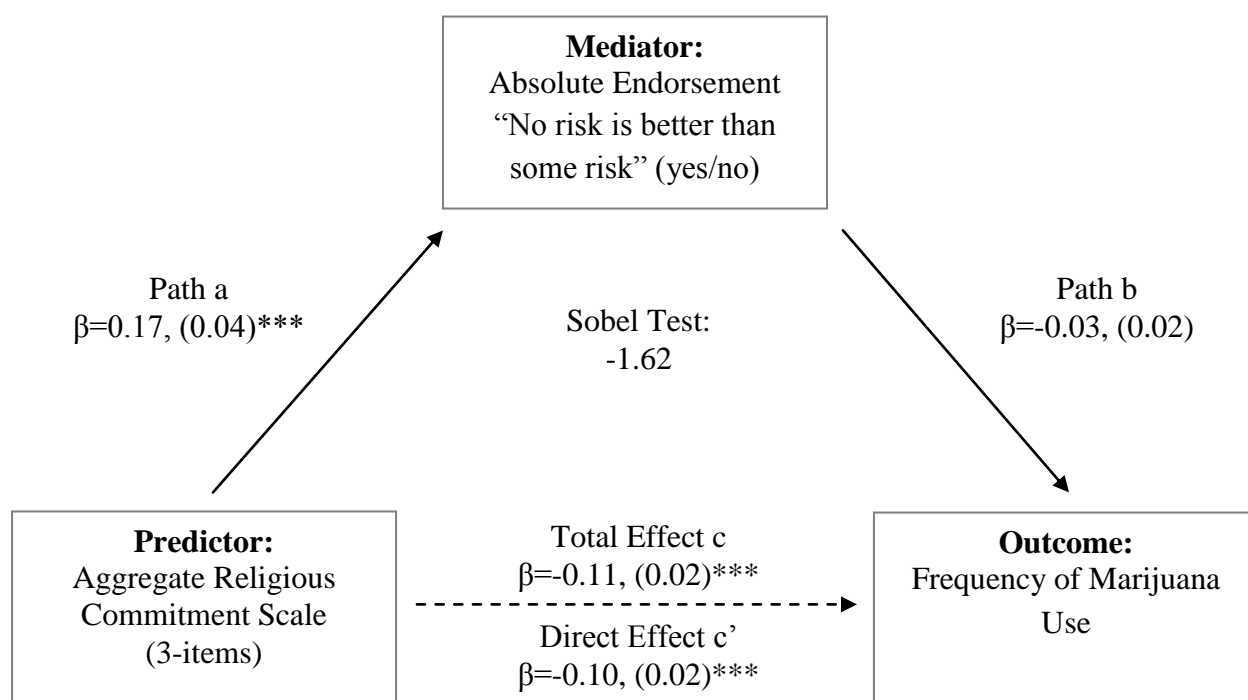


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.8

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Marijuana Use by Absolute Endorsement

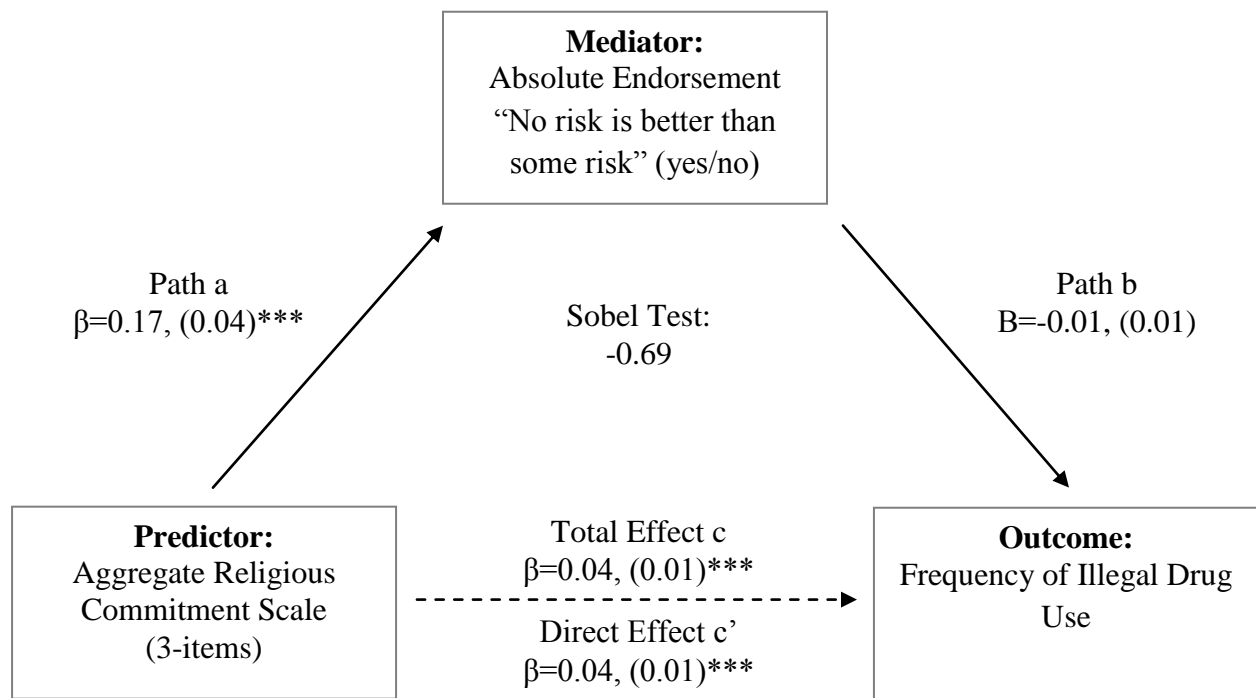


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.9

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Illegal Drug Use by Absolute Endorsement

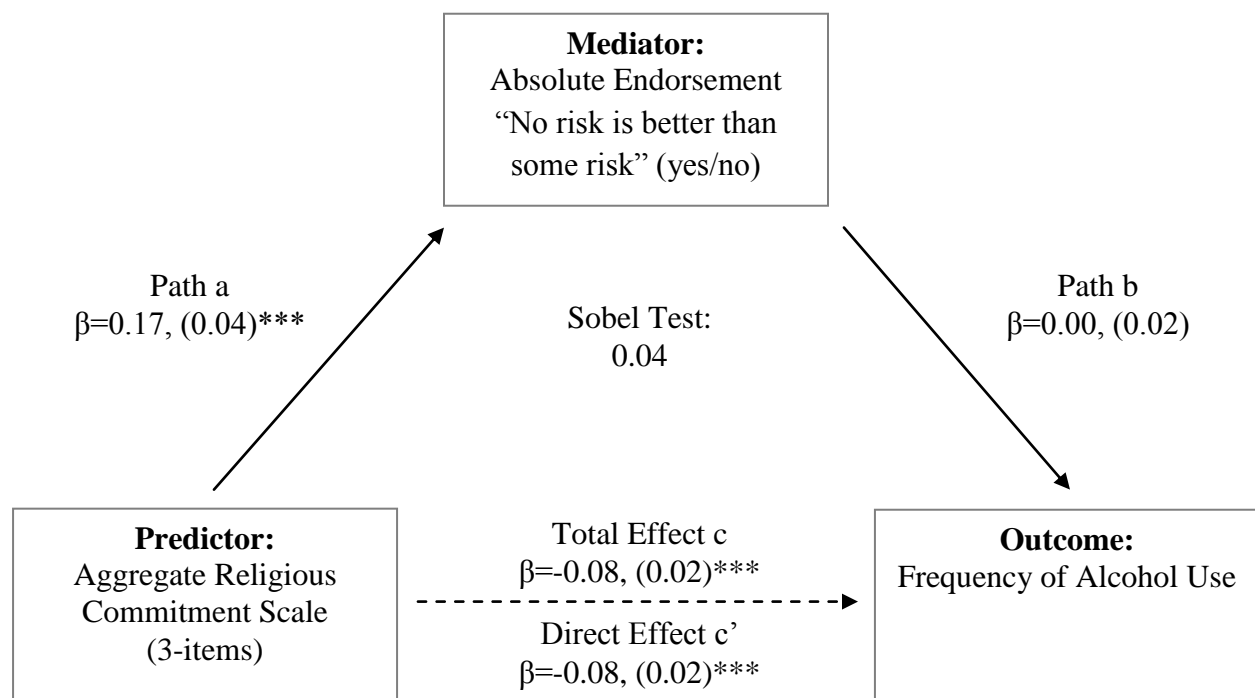


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.10

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Alcohol Use by Absolute Endorsement

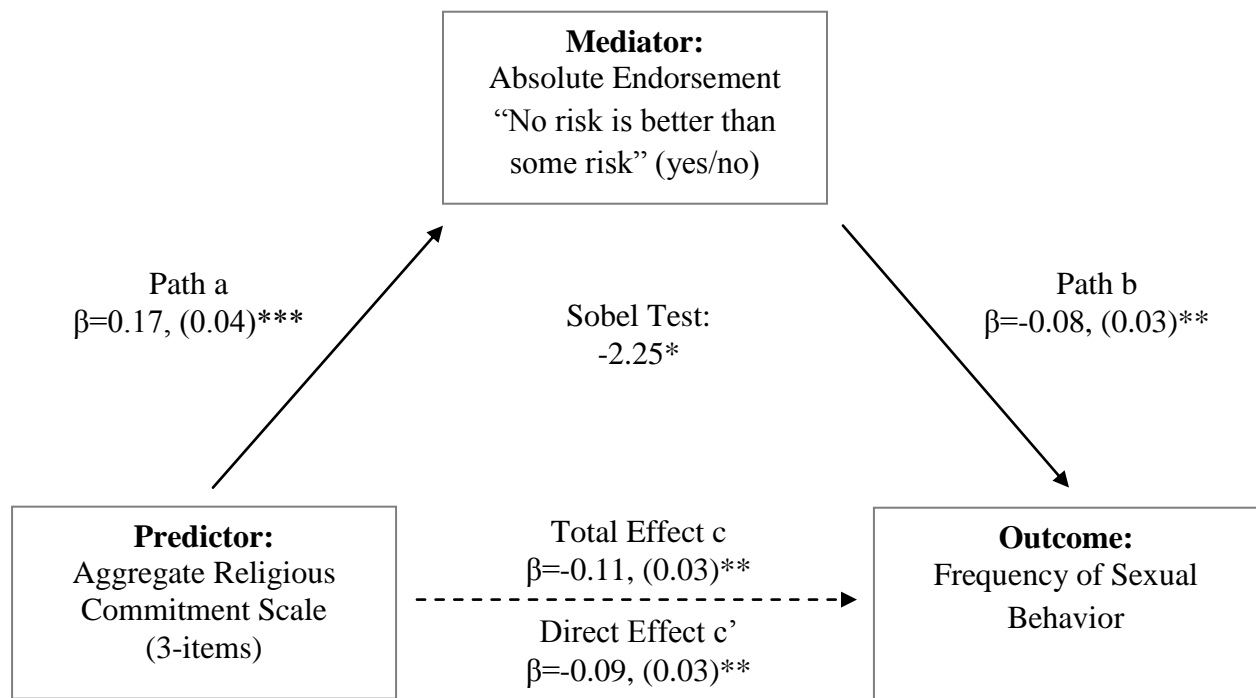


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.11

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Sexual Behavior by Absolute Endorsement

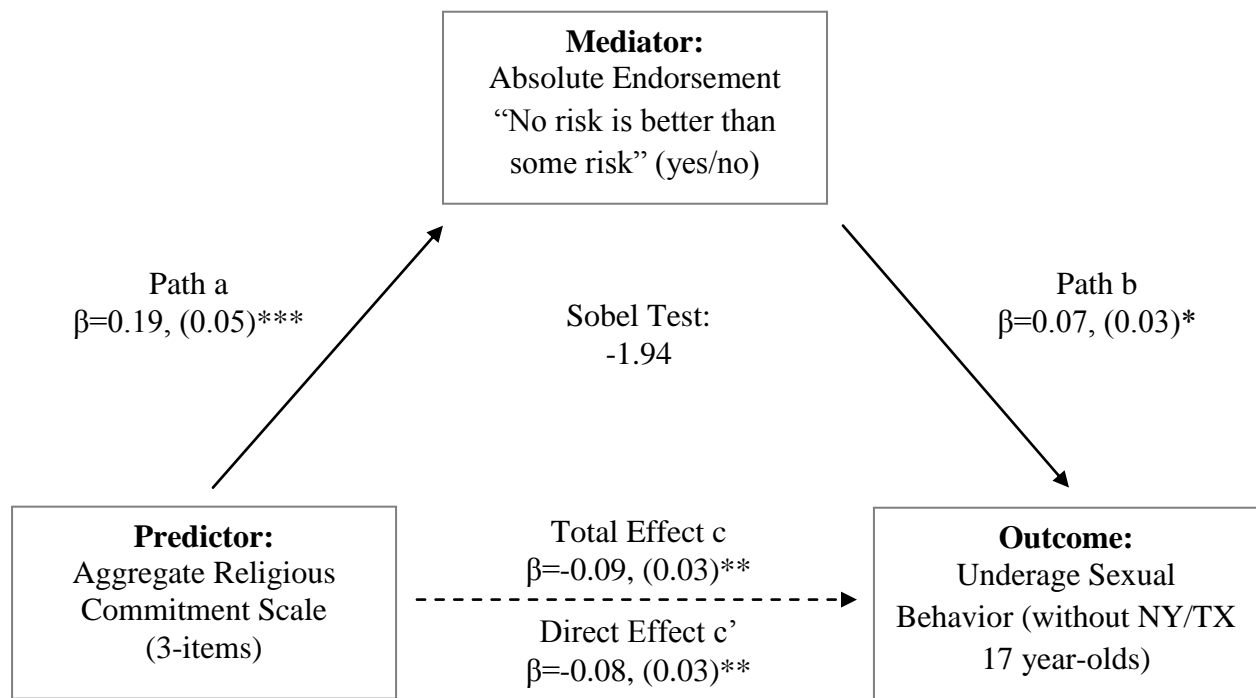


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.12

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Underage Sexual Behavior by Absolute Endorsement

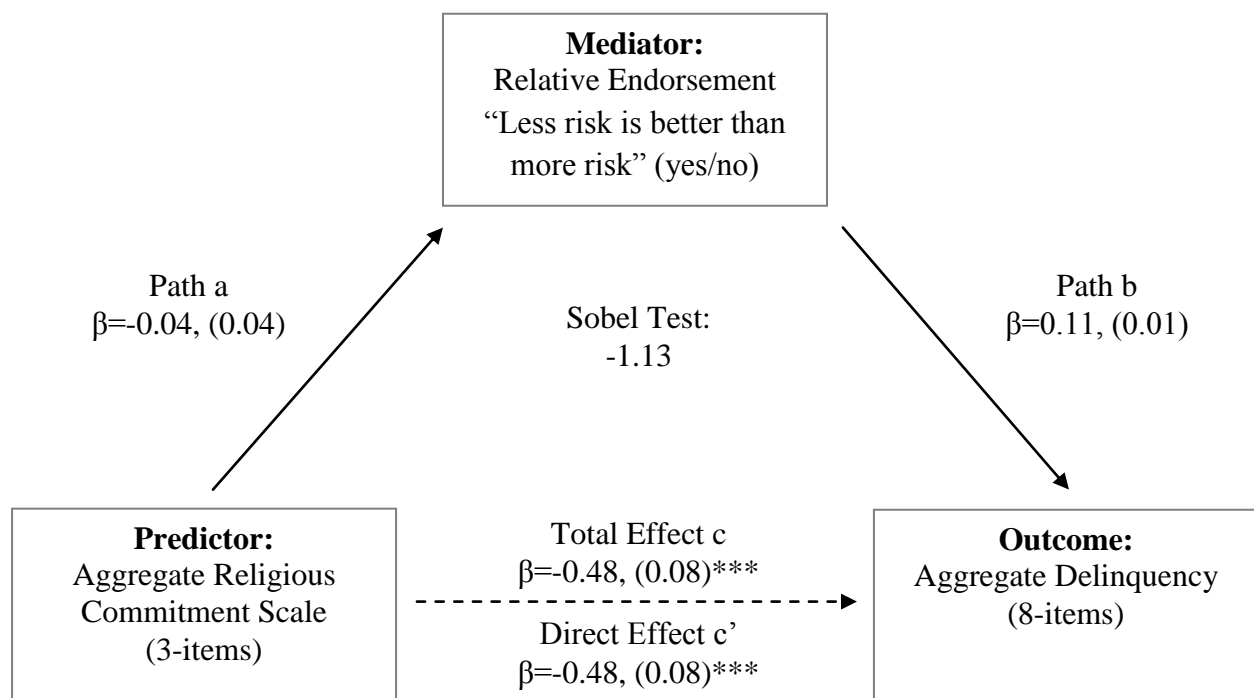


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.13

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Aggregate Delinquency by Relative Endorsement

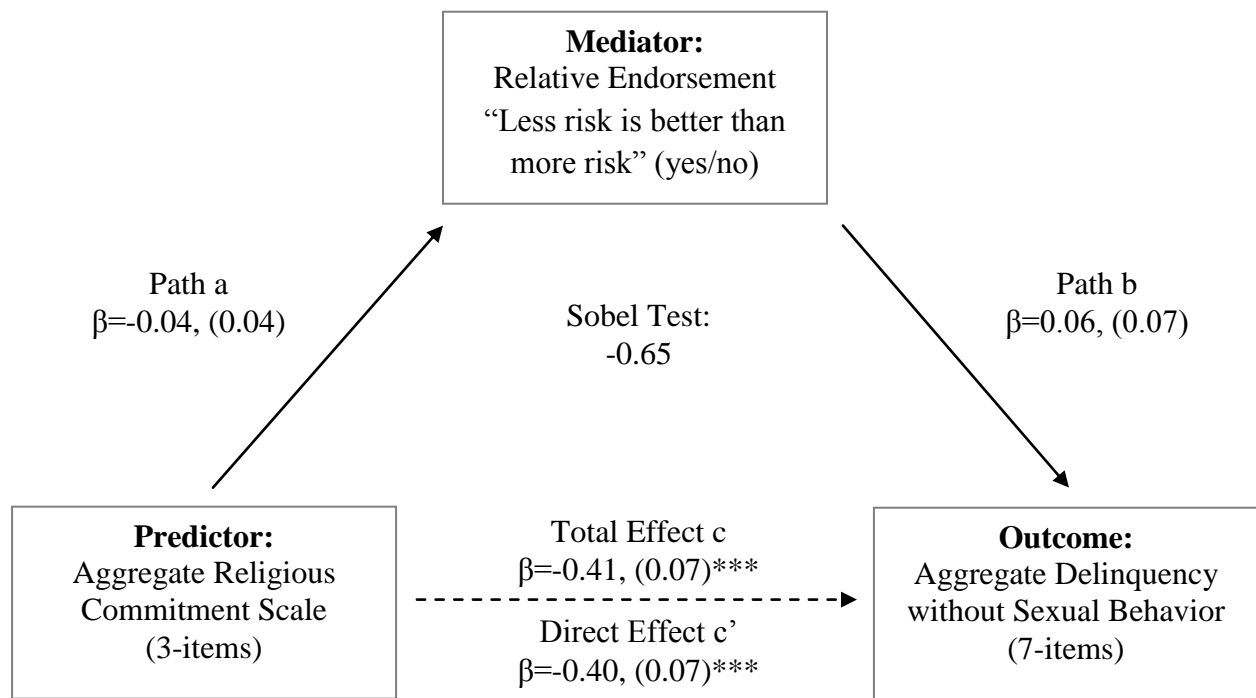


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.14

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Aggregate Delinquency (without Sexual Behavior) by Relative Endorsement

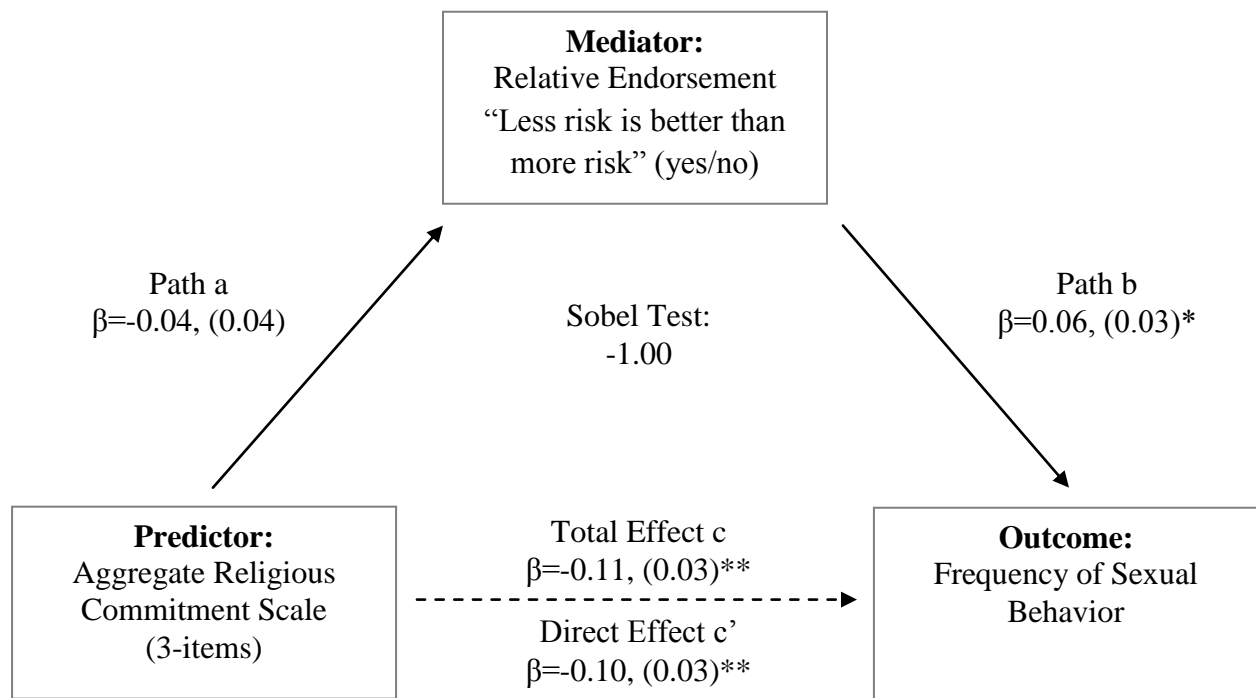


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.15

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Sexual Behavior by Relative Endorsement

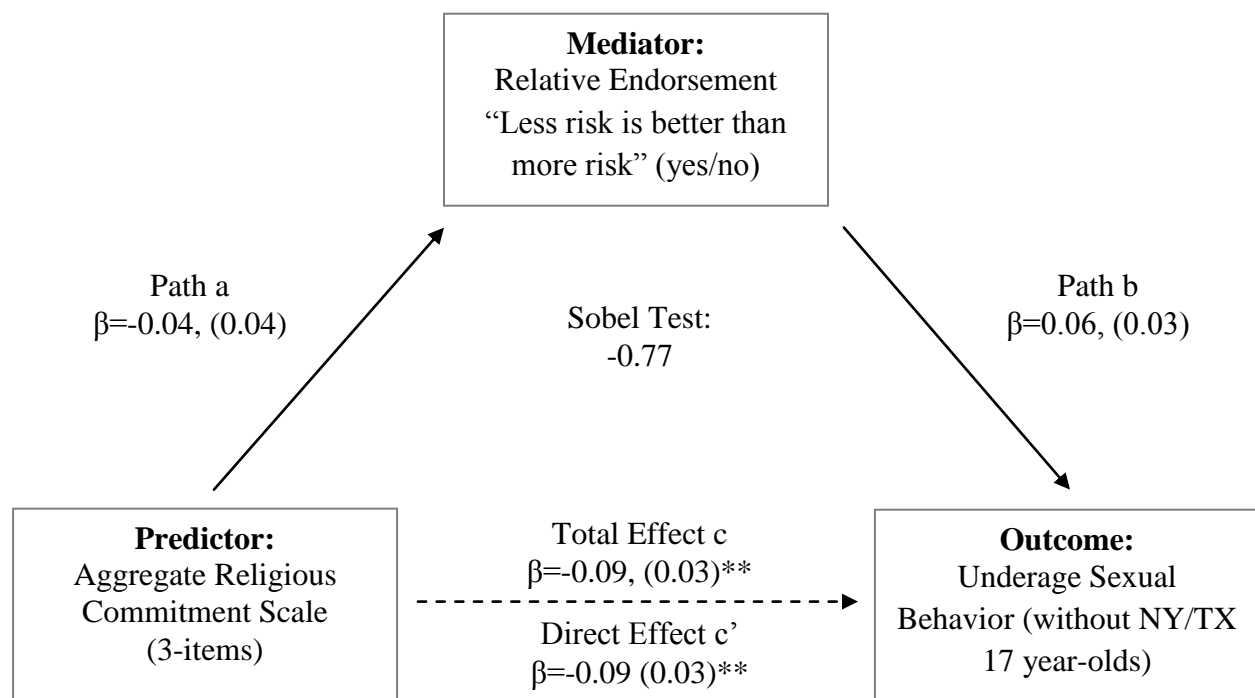


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.16

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Underage Sexual Behavior by Relative Endorsement

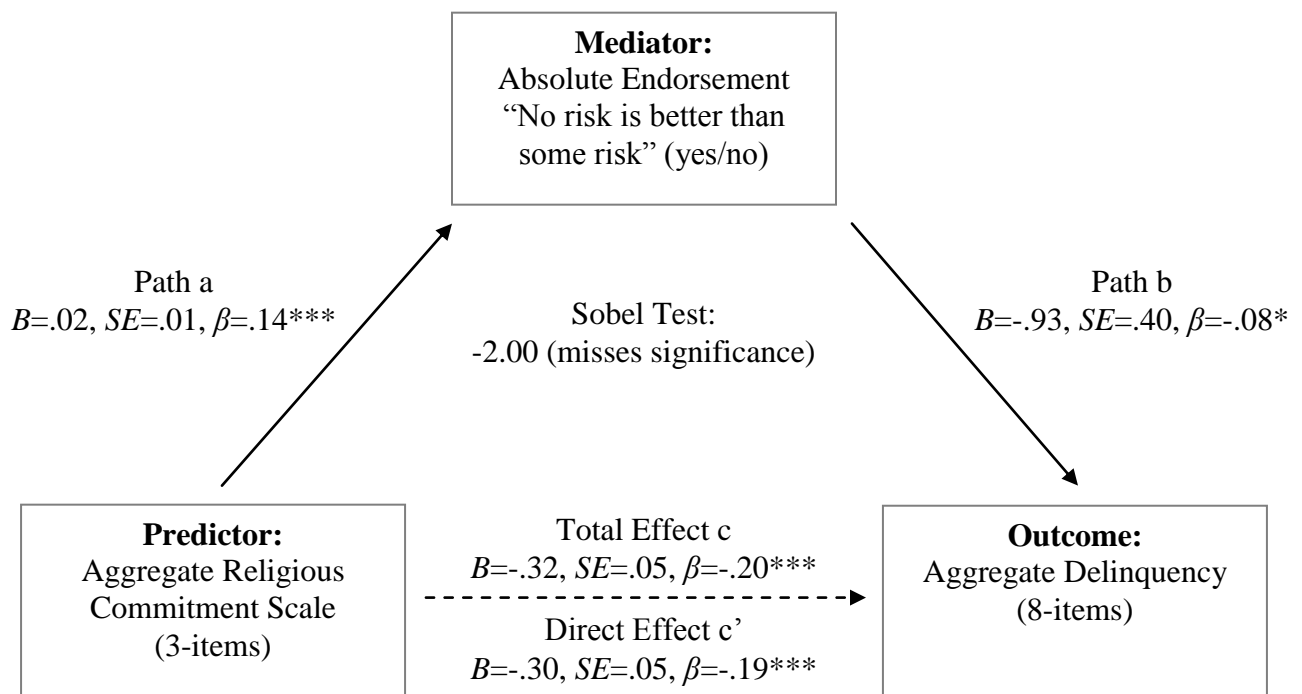


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.17

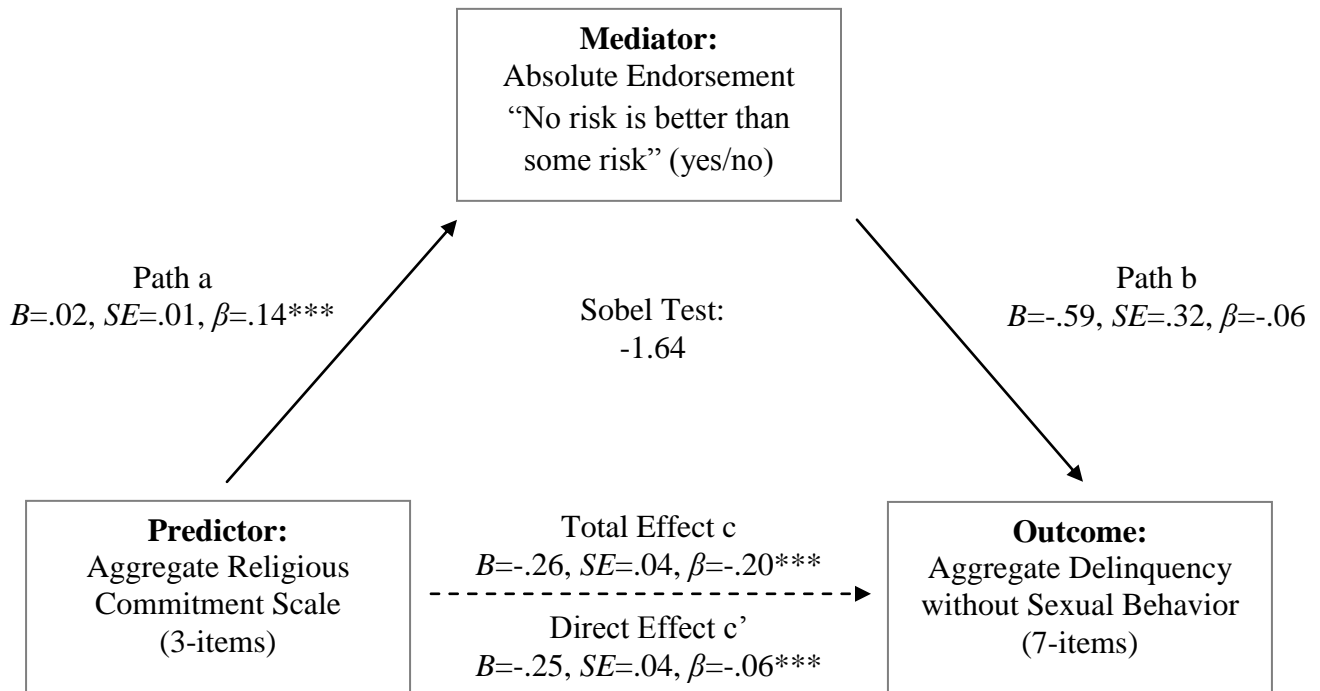
Mediation (Linear) – Aggregate Religious Commitment and Aggregate Delinquency by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.18

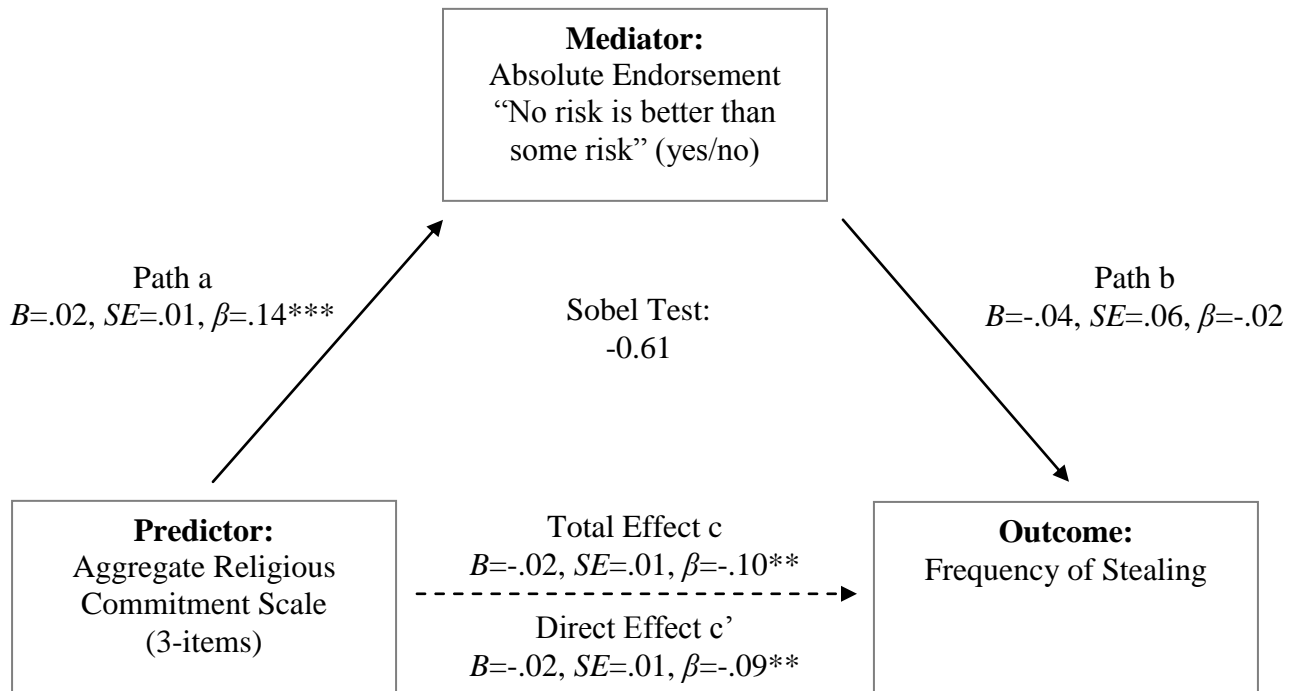
Mediation (Linear) – Aggregate Religious Commitment and Aggregate Delinquency (without Sexual Behavior) by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.19

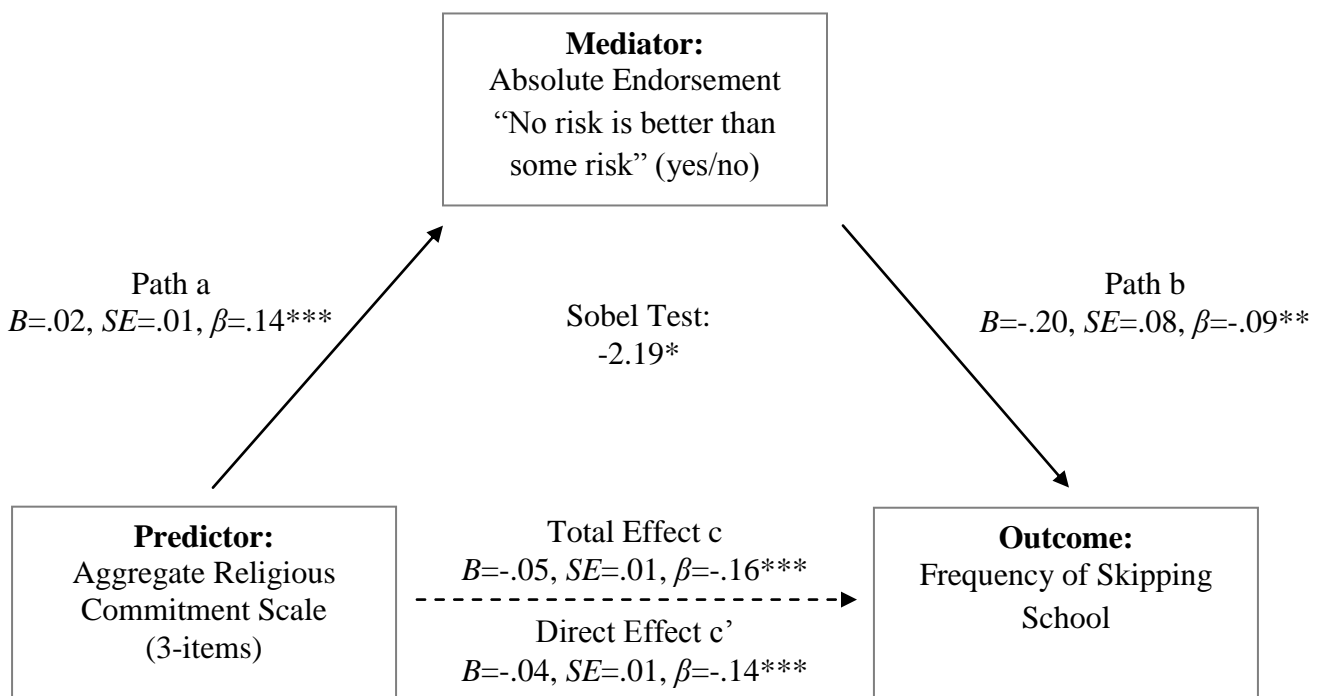
Mediation (Linear) – Aggregate Religious Commitment and Stealing by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.20

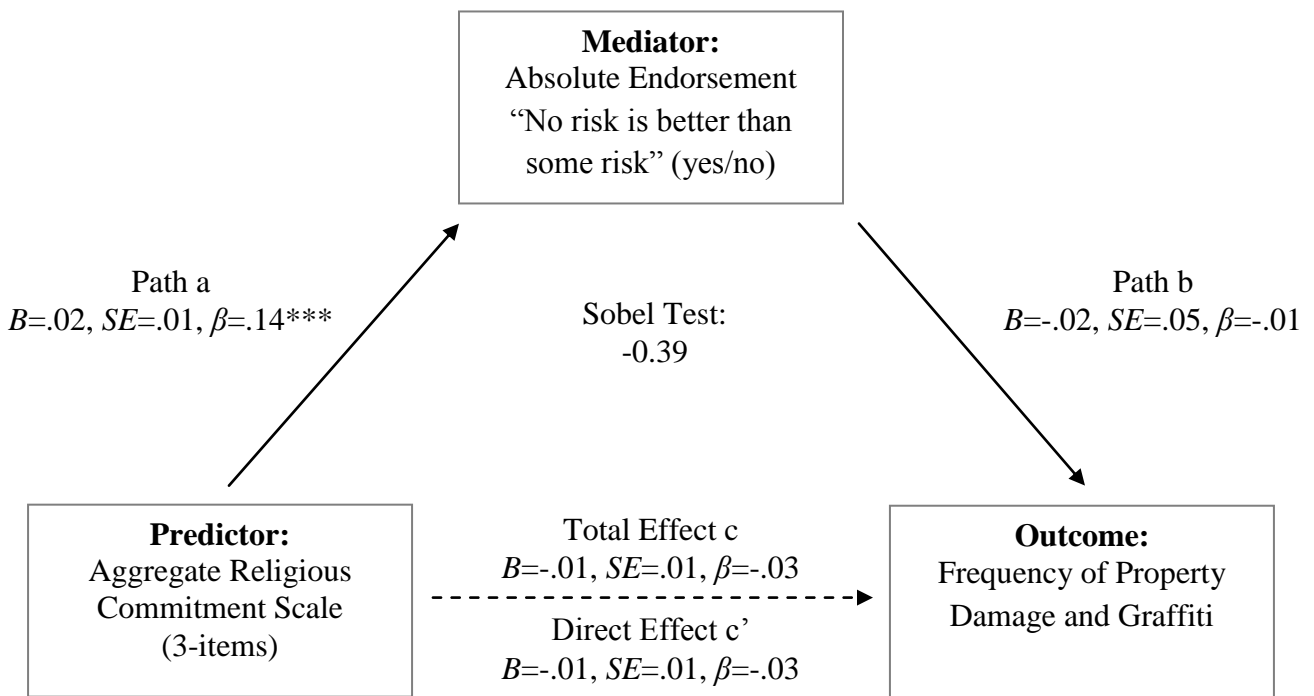
Mediation (Linear) – Aggregate Religious Commitment and Skipping School by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.21

Mediation (Linear) – Aggregate Religious Commitment and Property Damage/Graffiti by Absolute Endorsement

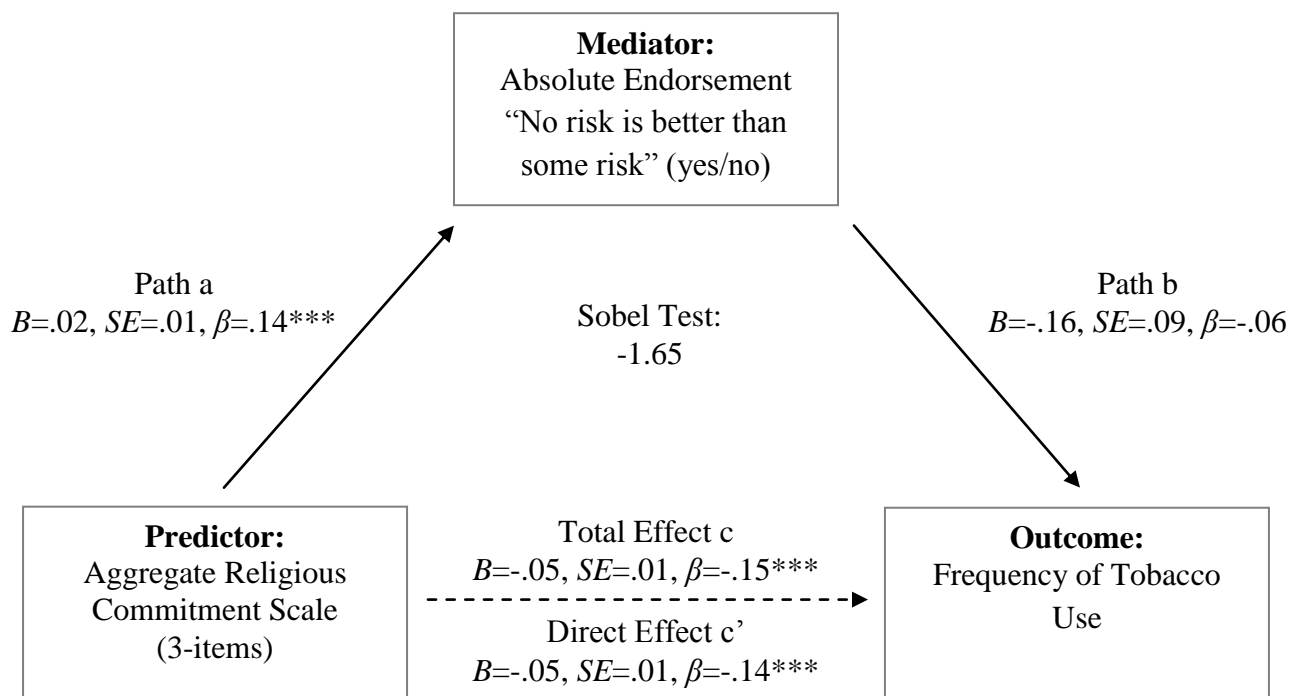


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Correlation between Aggregate Religious Commitment and Frequency of Property Damage was not significant at $r_p(807) = -0.03, p < 0.38$

Figure I.22

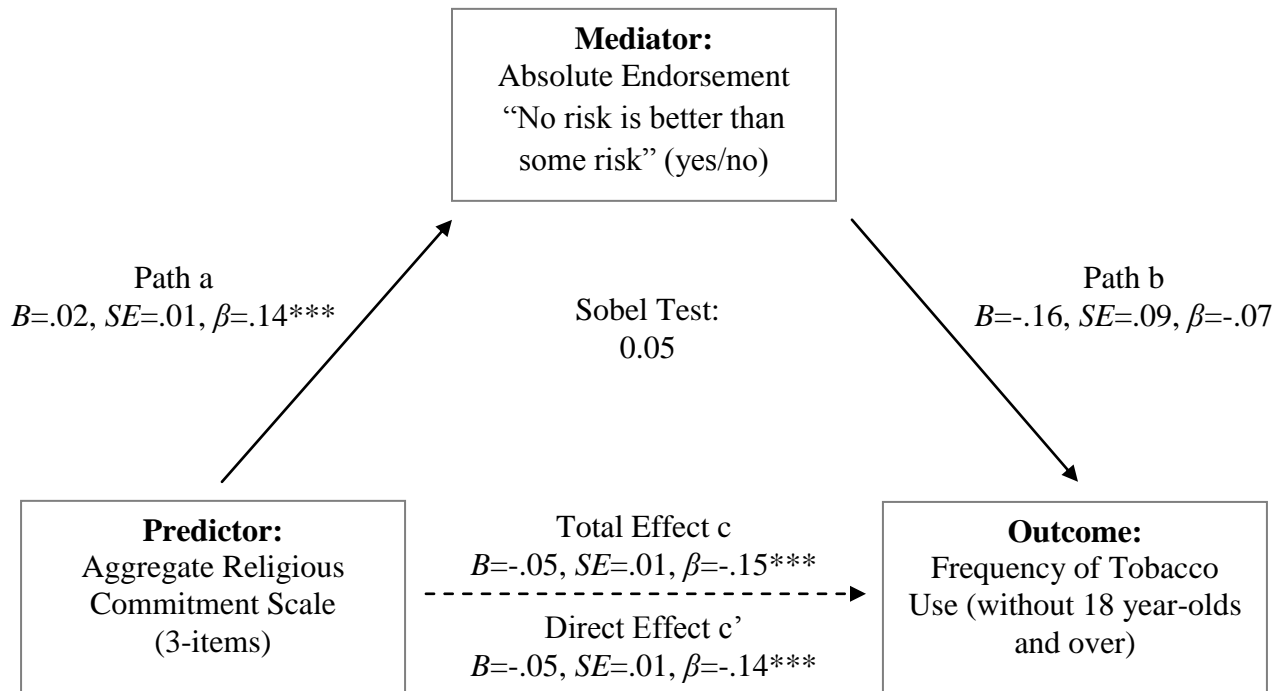
Mediation (Linear) – Aggregate Religious Commitment and Tobacco Use by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.23

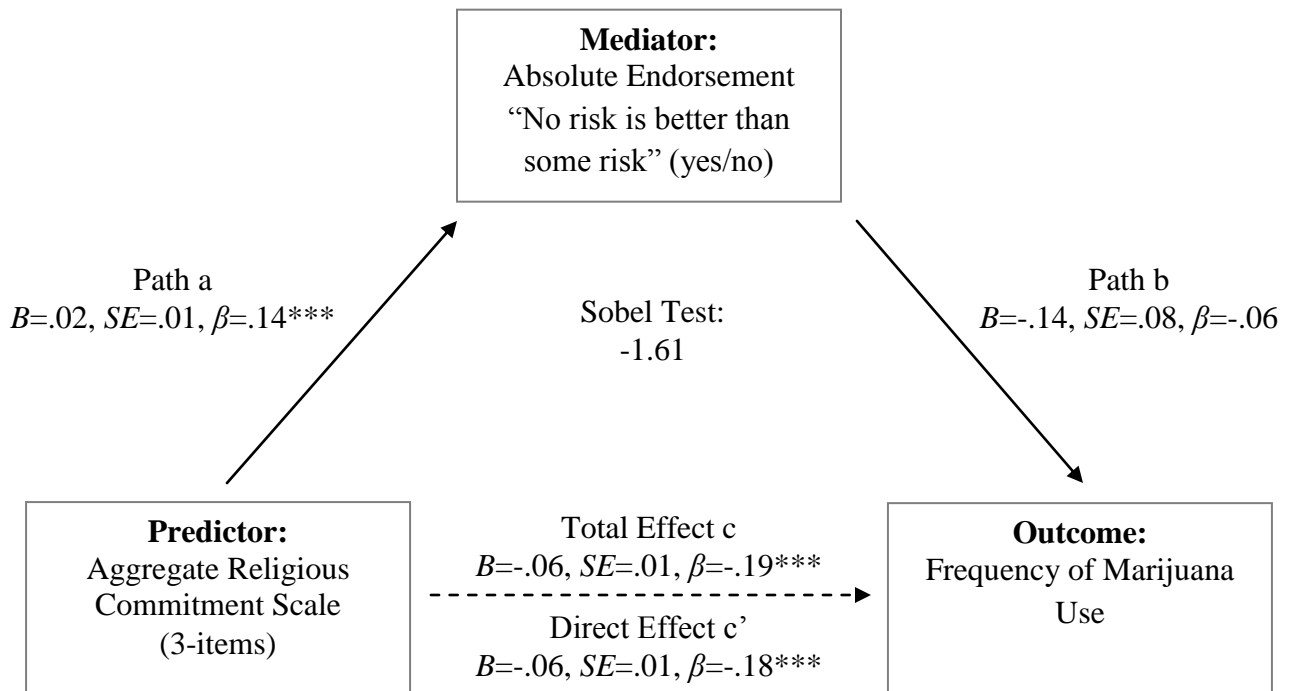
Mediation (Linear) – Aggregate Religious Commitment and Underage Tobacco Use by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.24

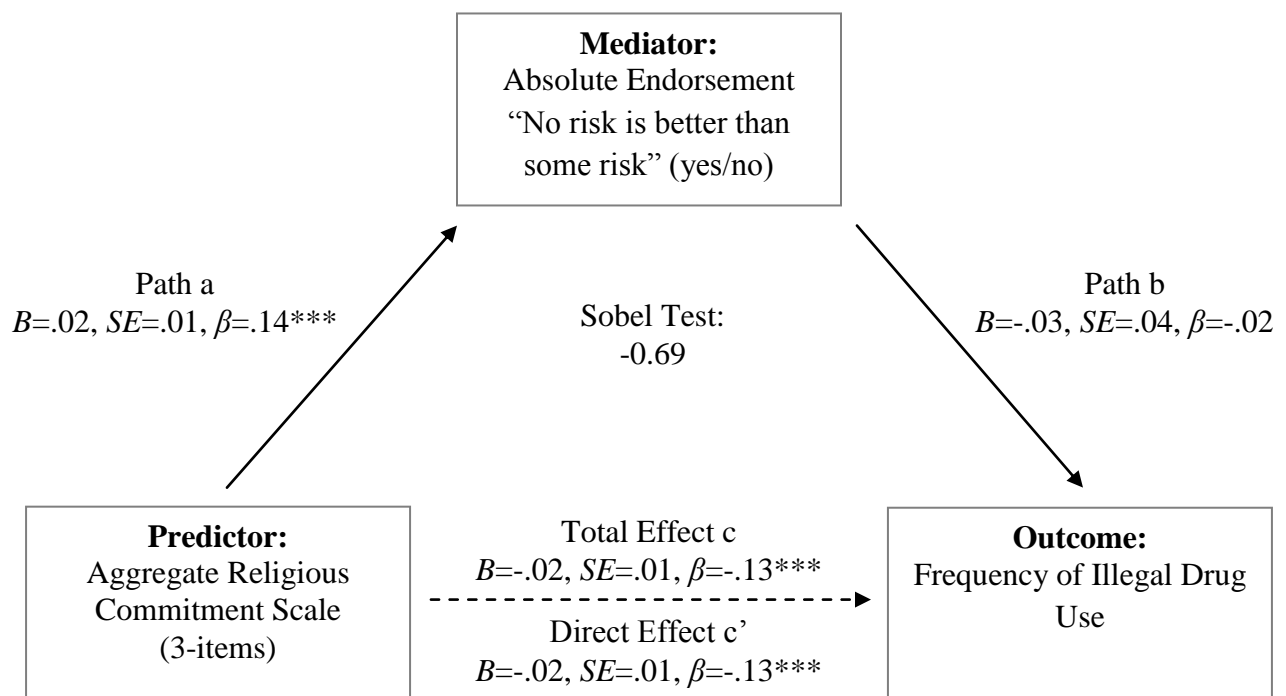
Mediation (Linear) – Aggregate Religious Commitment and Marijuana Use by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.25

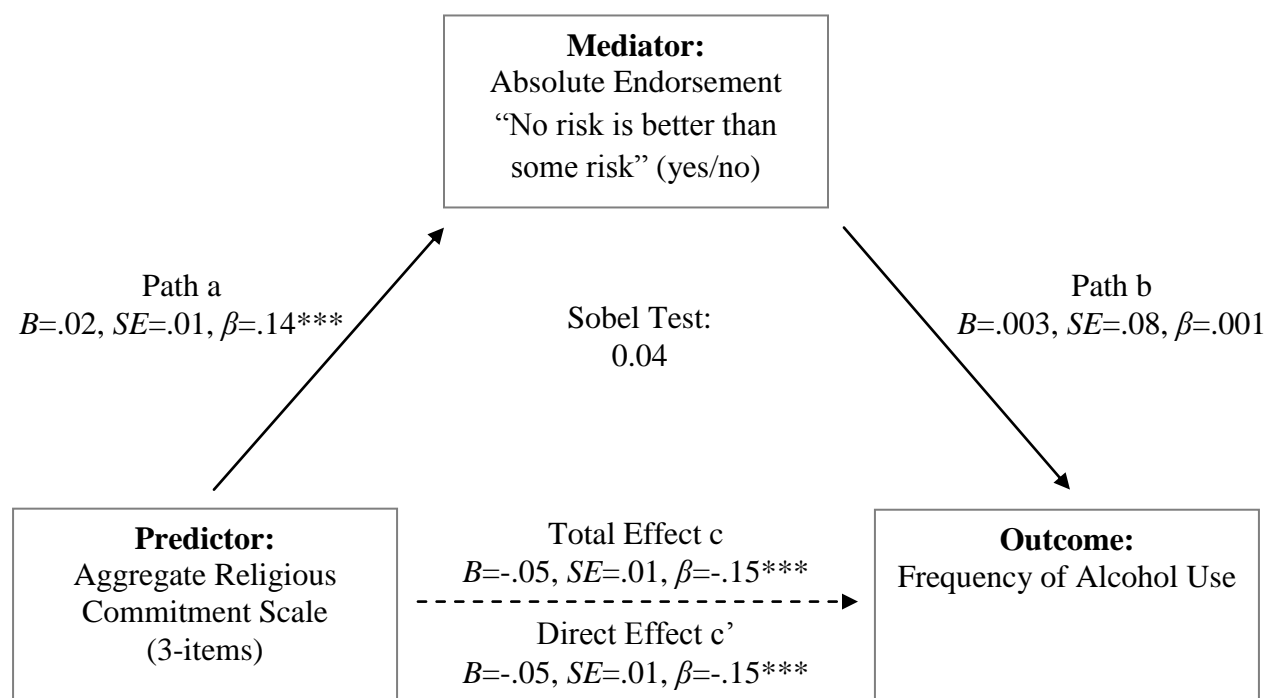
Mediation (Linear) – Aggregate Religious Commitment and Illegal Drug Use by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.26

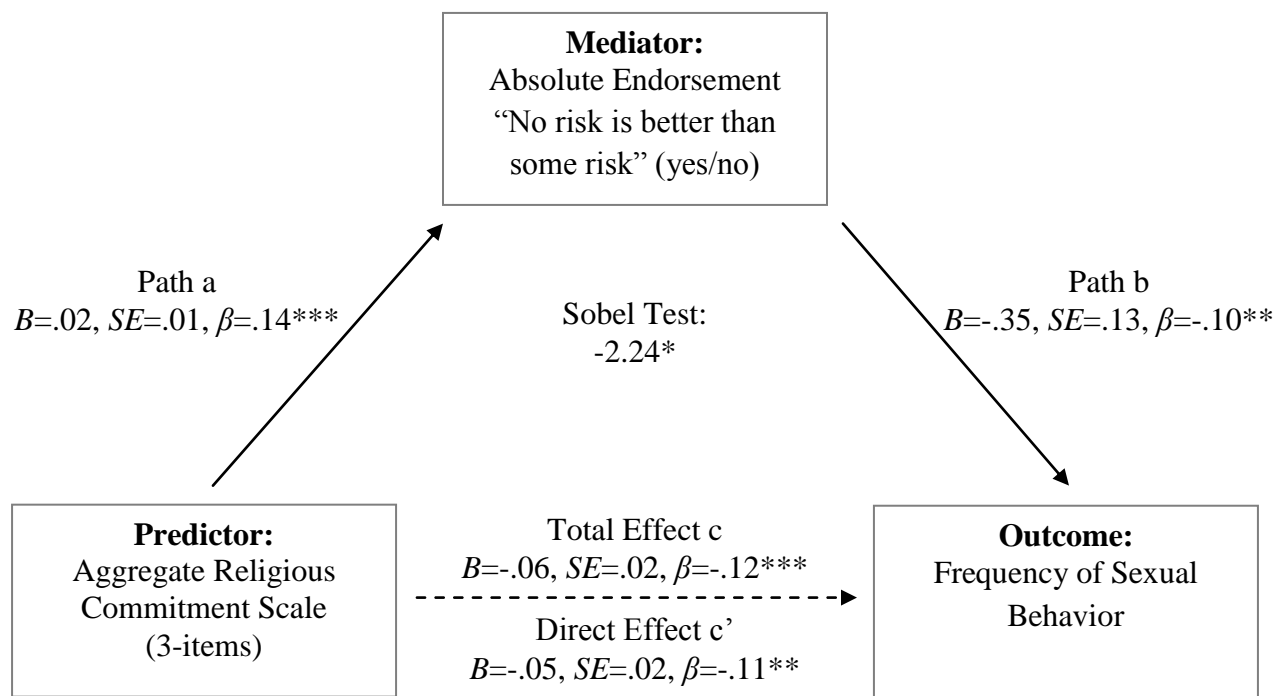
Mediation (Linear) – Aggregate Religious Commitment and Alcohol Use by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.27

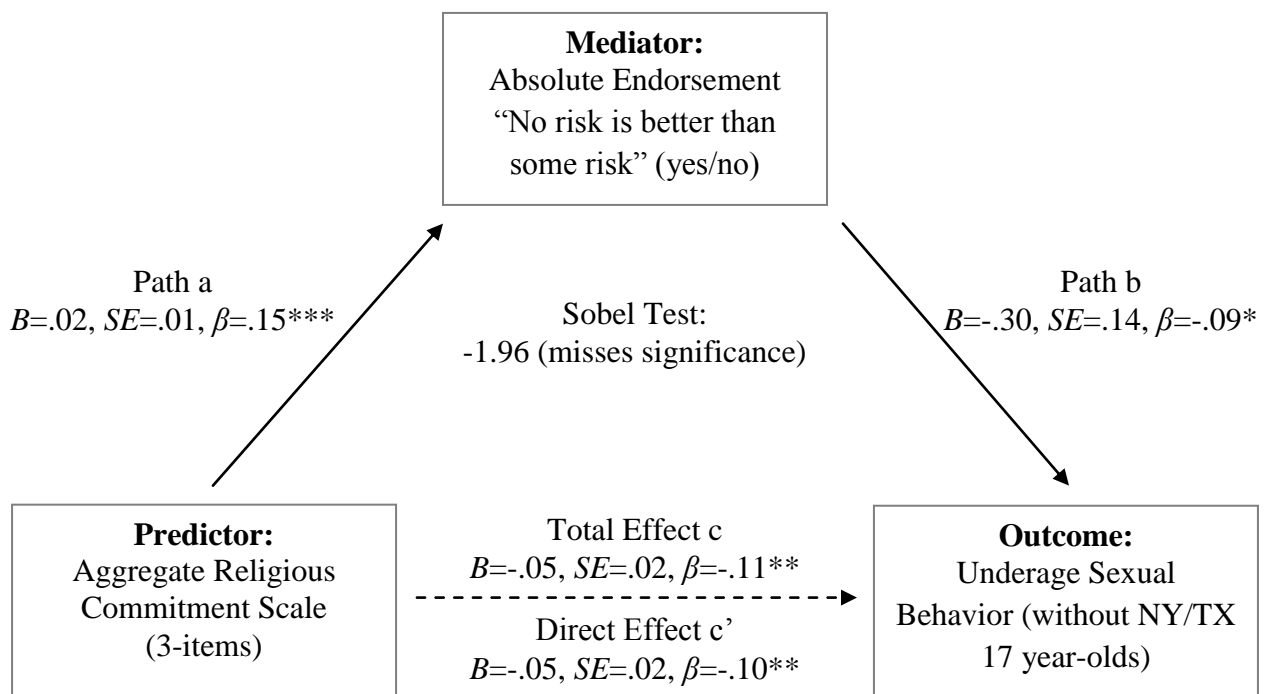
Mediation (Linear) – Aggregate Religious Commitment and Sexual Behavior by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.28

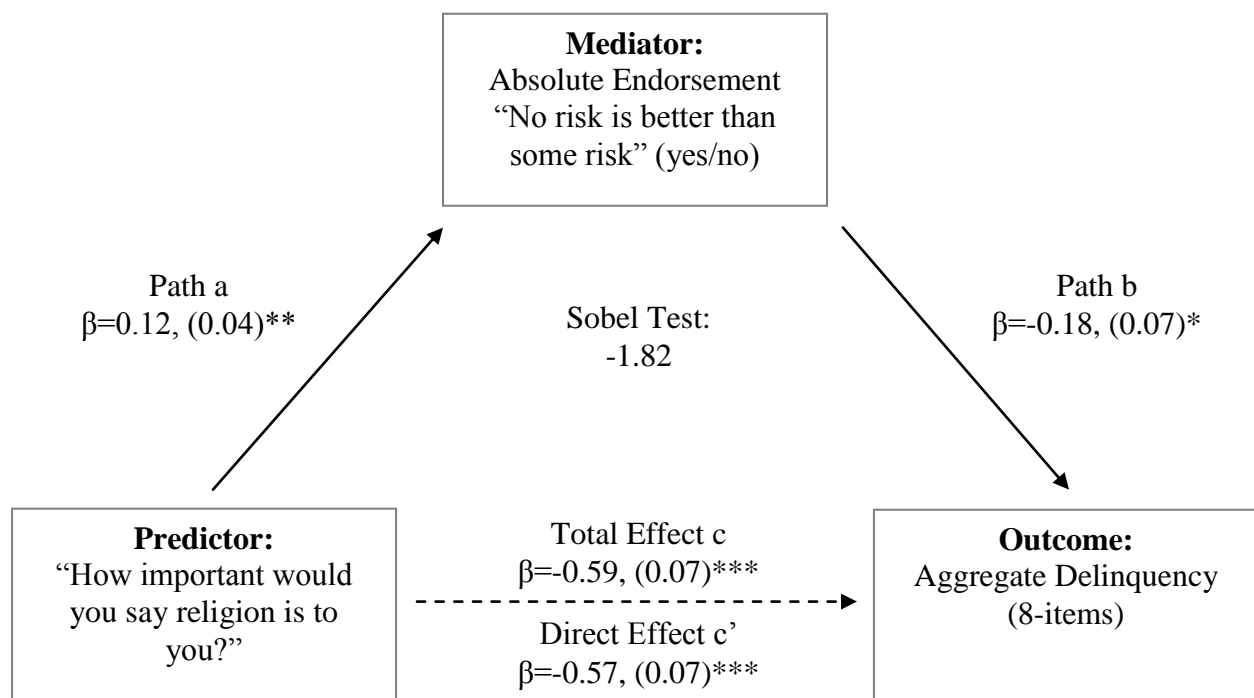
Mediation (Linear) – Aggregate Religious Commitment and Underage Sexual Behavior by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Figure I.29

Mediation (Linear and Logistic) – Religious Importance and Aggregate Delinquency by Absolute Endorsement

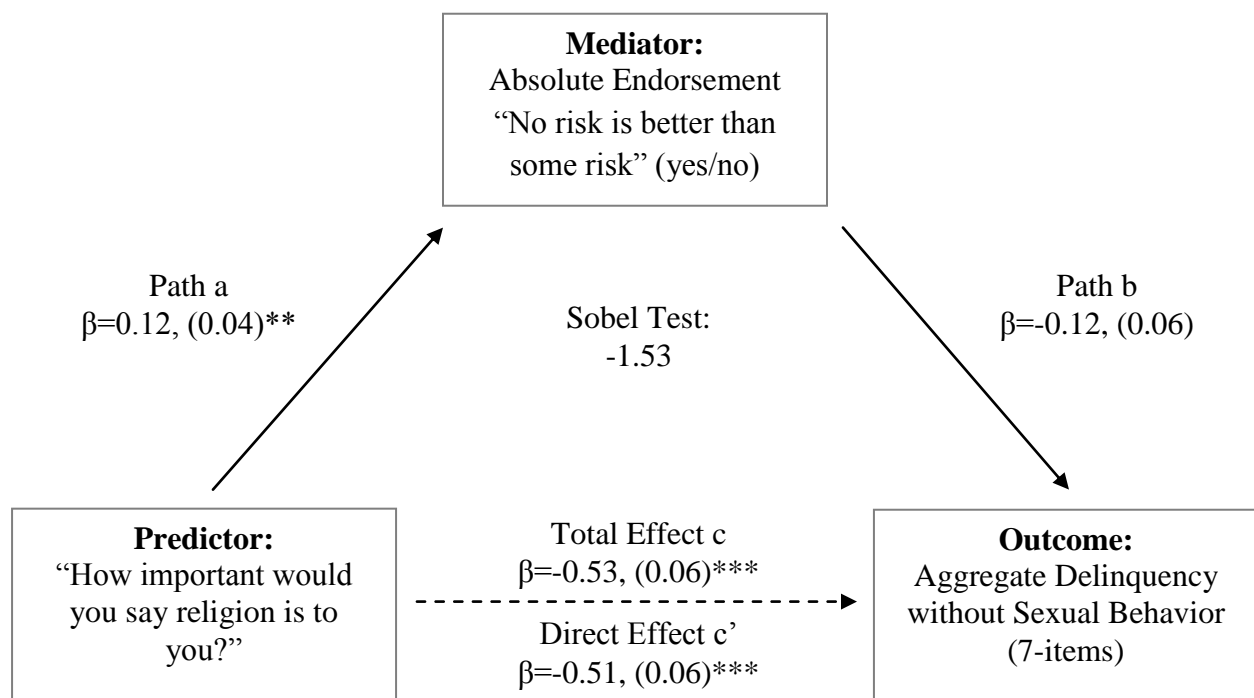


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.30

Mediation (Linear and Logistic) – Religious Importance and Aggregate Delinquency (without Sexual Behavior) by Absolute Endorsement

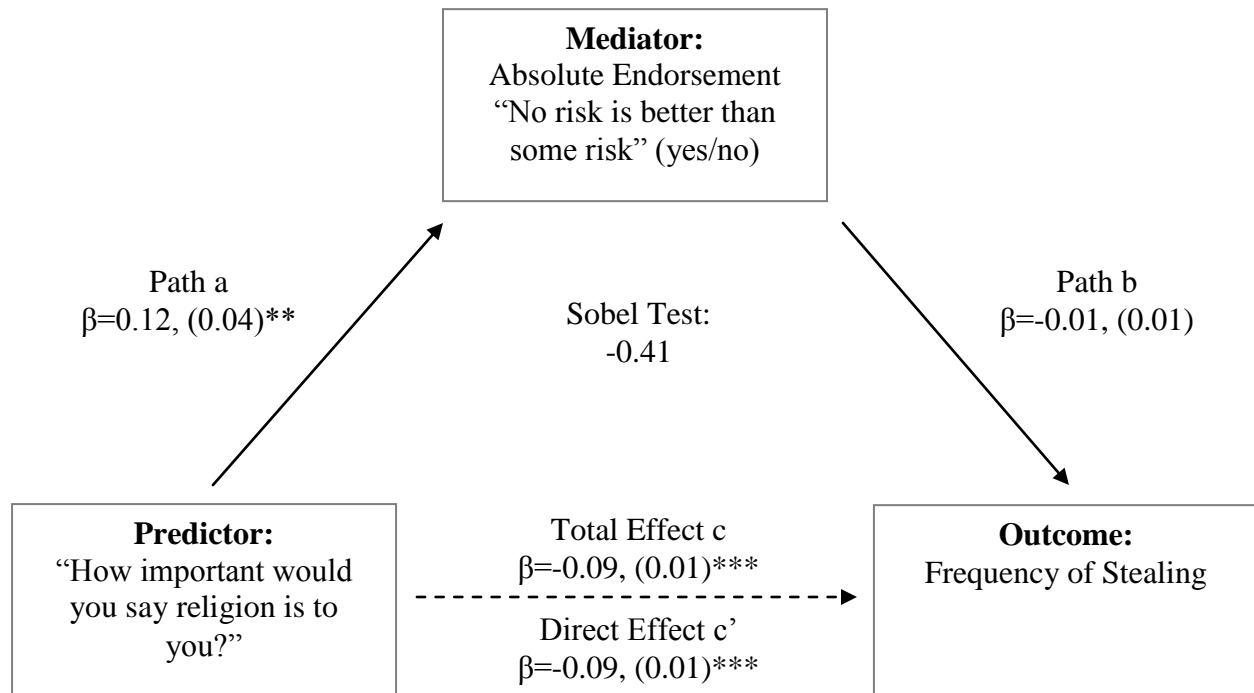


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.31

Mediation (Linear and Logistic) – Religious Importance and Stealing by Absolute Endorsement

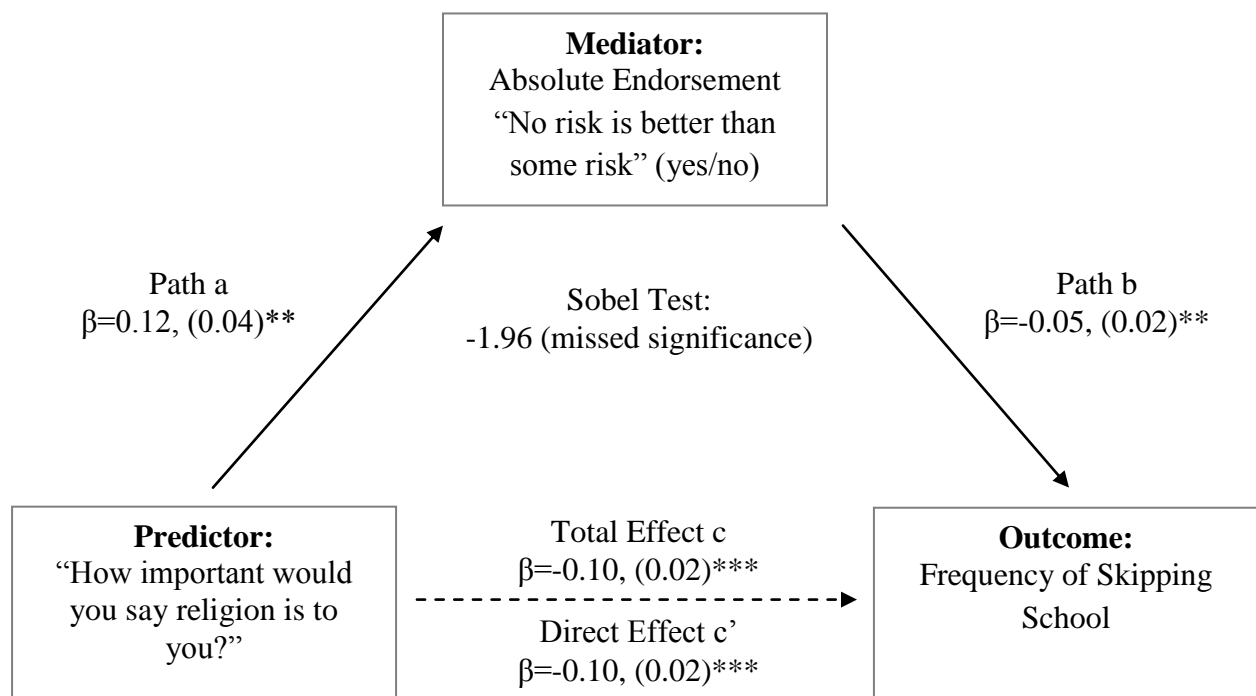


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.32

Mediation (Linear and Logistic) – Religious Importance and Skipping School by Absolute Endorsement

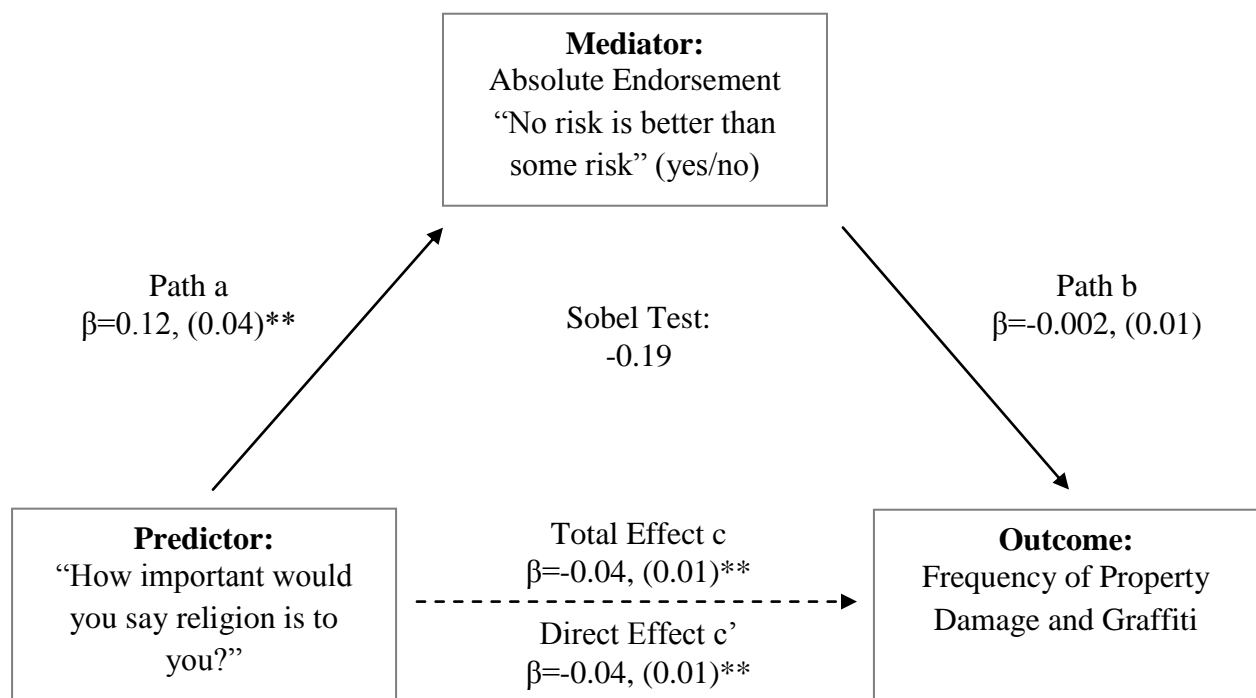


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.33

Mediation (Linear and Logistic) – Religious Importance and Property Damage/Graffiti by Absolute Endorsement

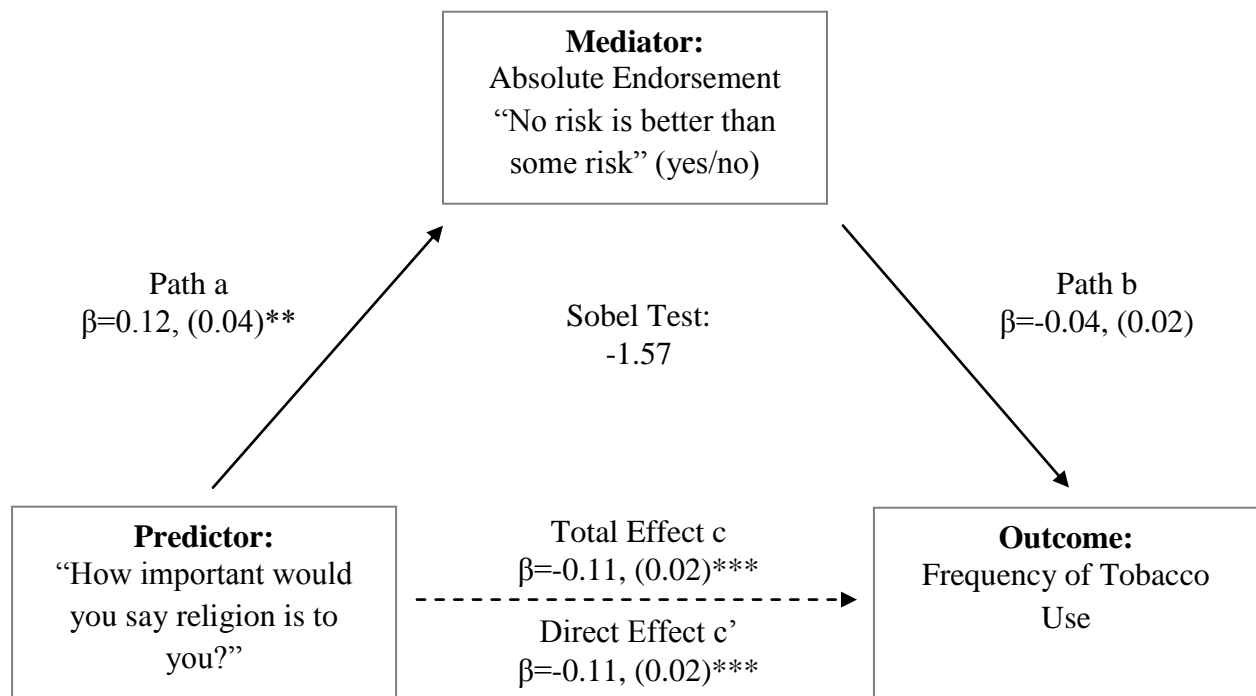


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.34

Mediation (Linear and Logistic) – Religious Importance and Tobacco Use by Absolute Endorsement

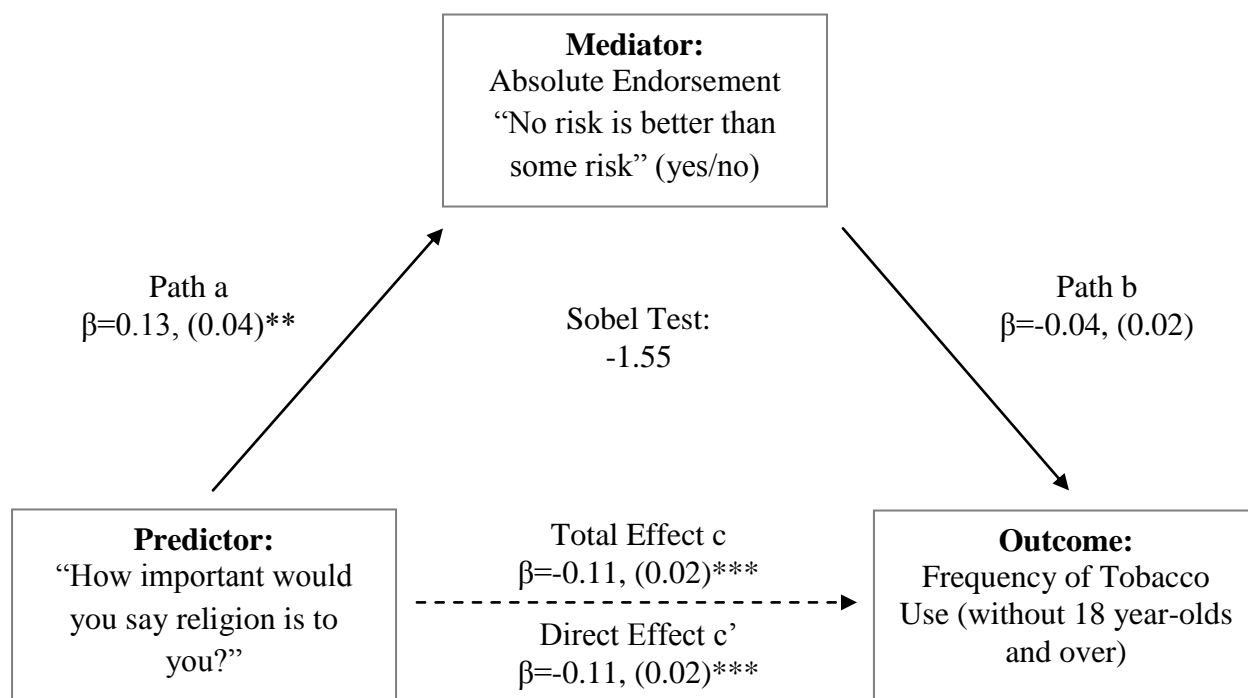


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.35

Mediation (Linear and Logistic) – Religious Importance and Underage Tobacco Use by Absolute Endorsement

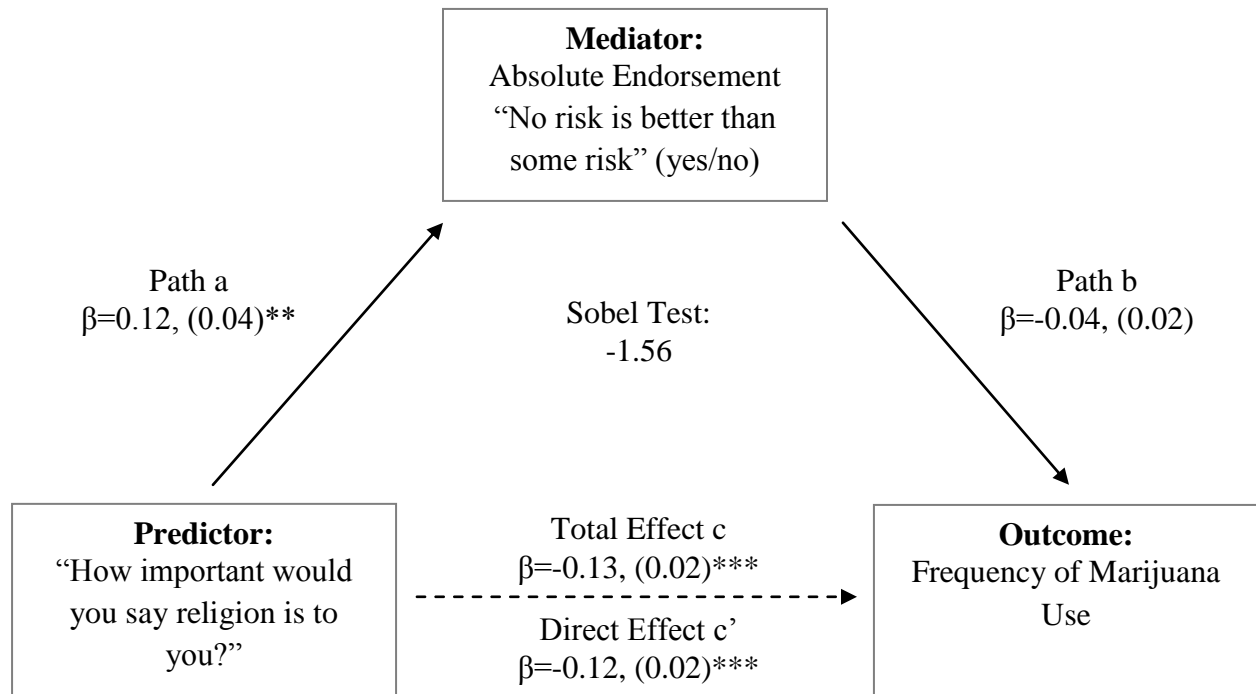


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.36

Mediation (Linear and Logistic) – Religious Importance and Marijuana Use by Absolute Endorsement

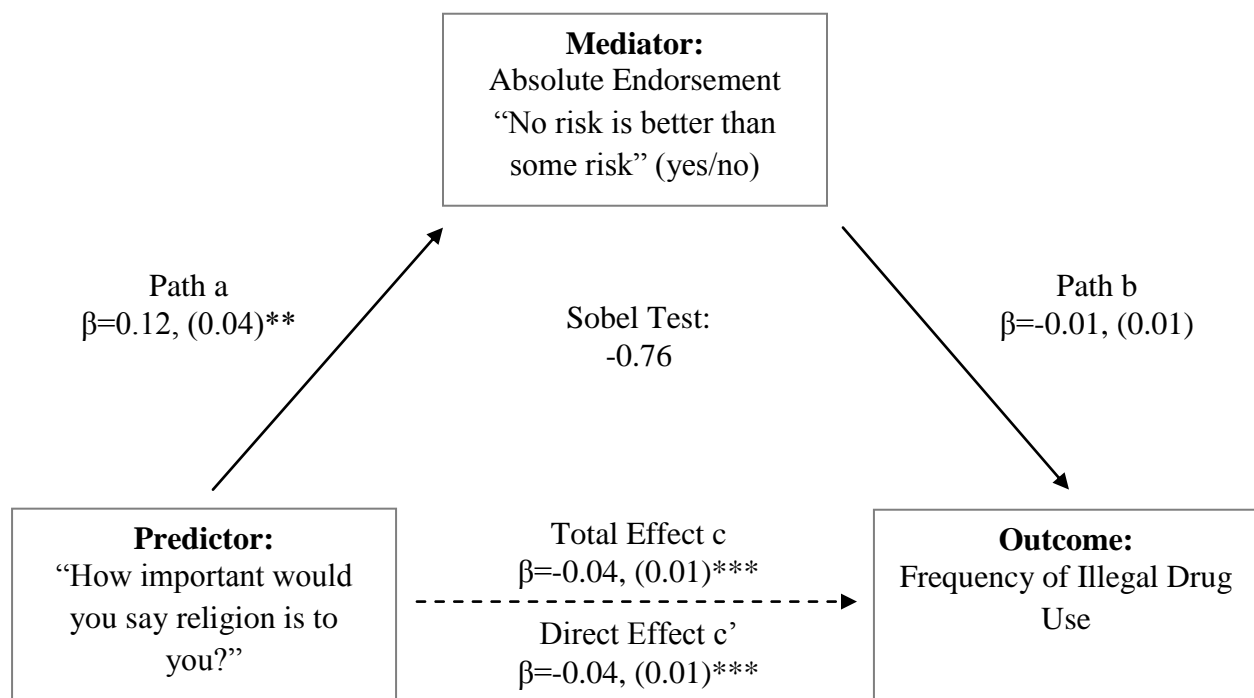


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.37

Mediation (Linear and Logistic) – Religious Importance and Illegal Drug Use by Absolute Endorsement

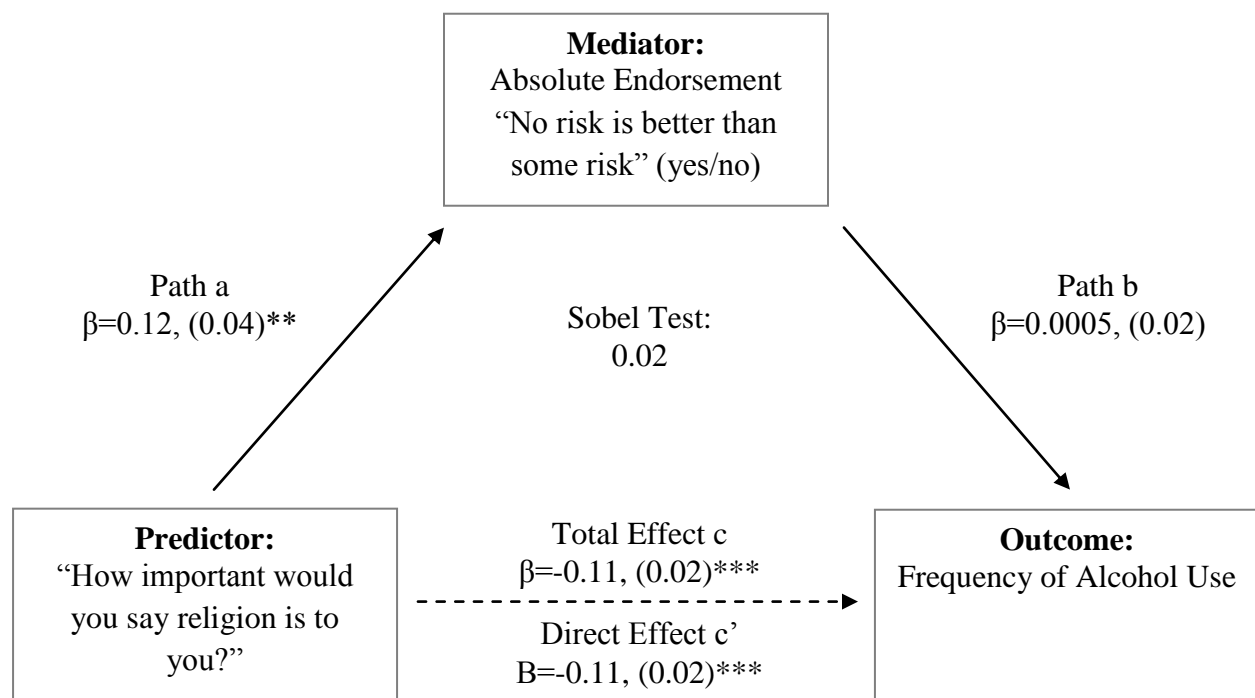


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.38

Mediation (Linear and Logistic) – Religious Importance and Alcohol Use by Absolute Endorsement

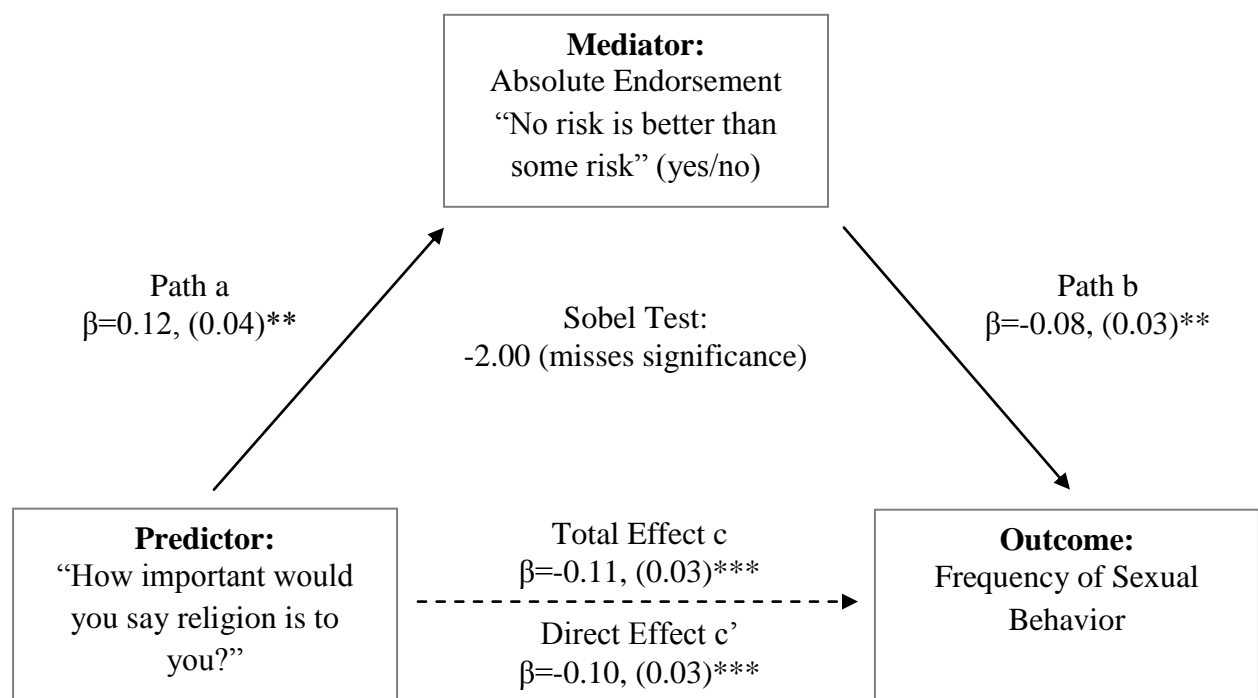


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.39

Mediation (Linear and Logistic) – Religious Importance and Sexual Behavior by Absolute Endorsement

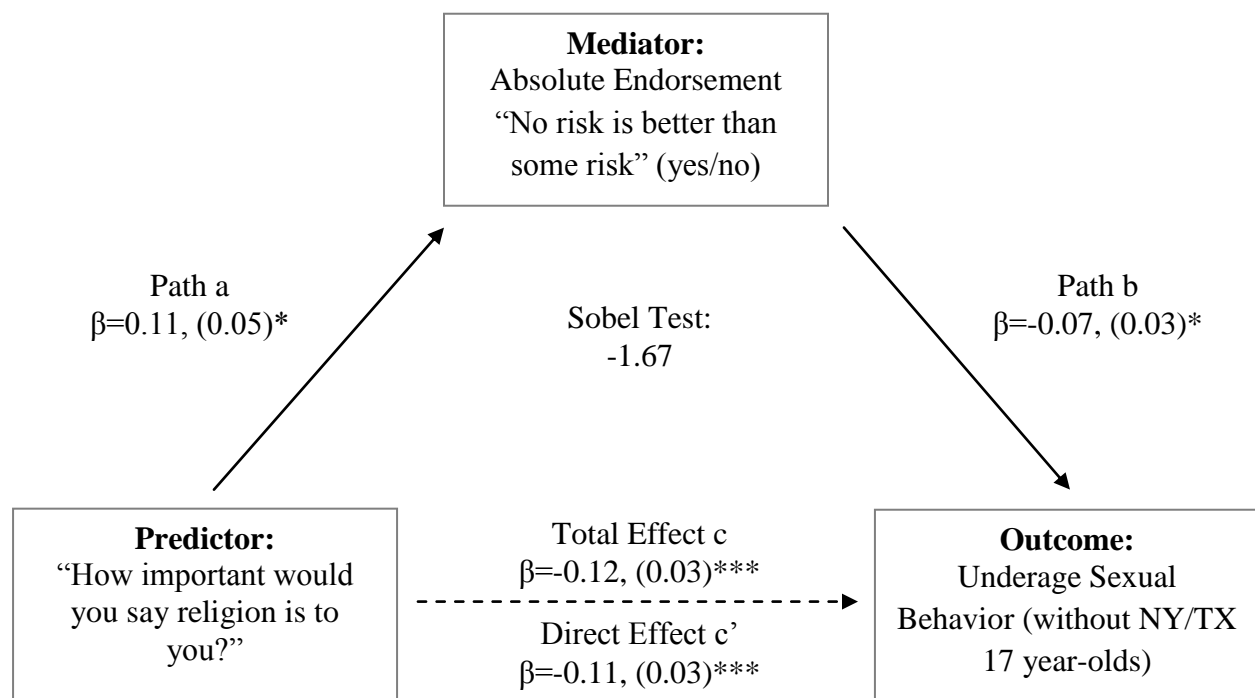


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.40

Mediation (Linear and Logistic) – Religious Importance and Underage Sexual Behavior by Absolute Endorsement

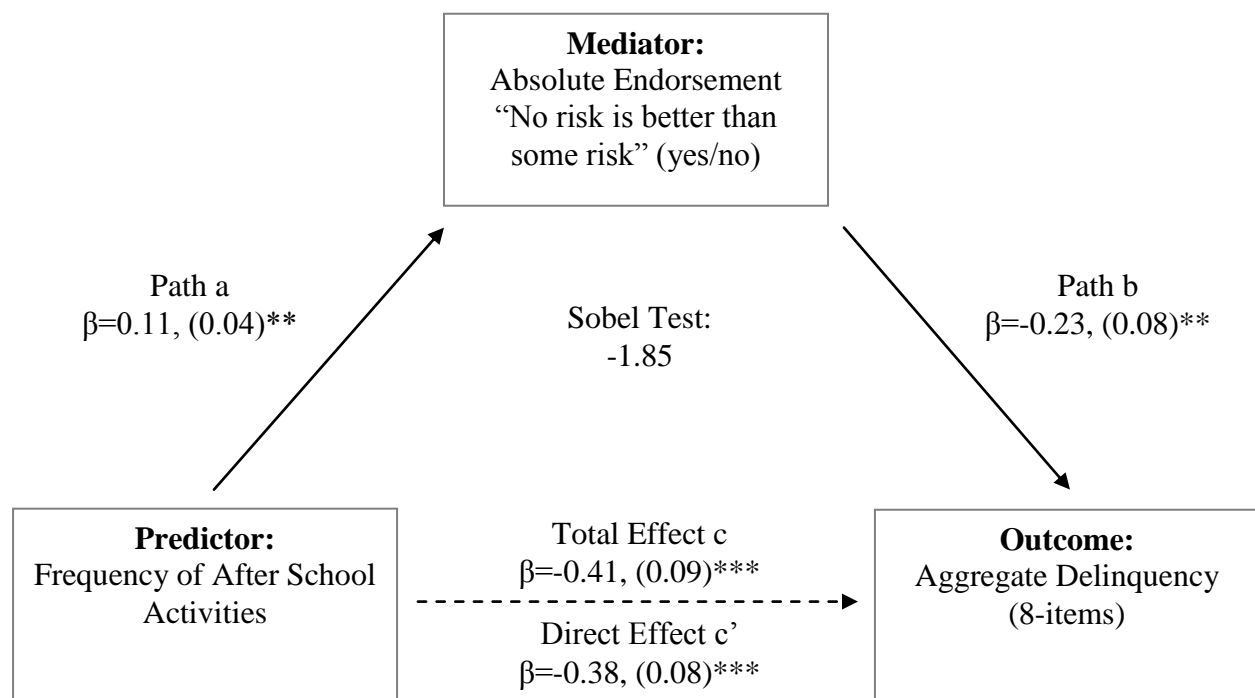


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.41

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Aggregate Delinquency by Absolute Endorsement

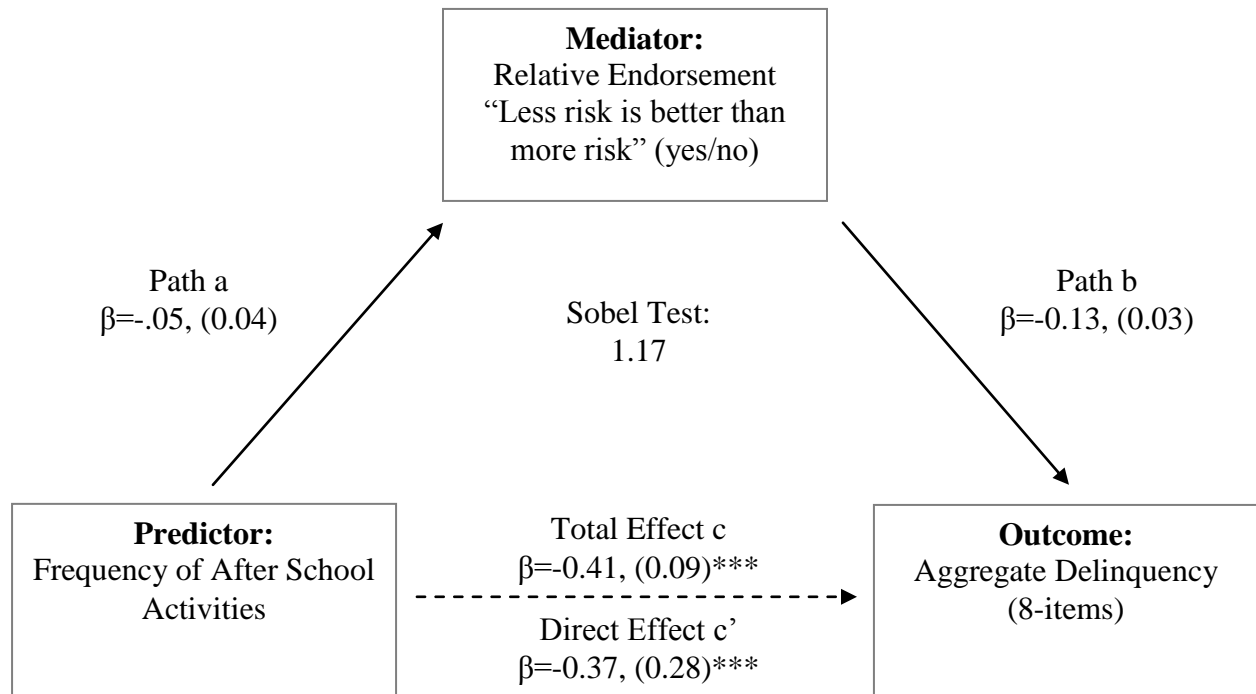


Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

Figure I.42

Mediation (Linear and Logistic) – Aggregate Religious Commitment and Aggregate Delinquency by Absolute Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$

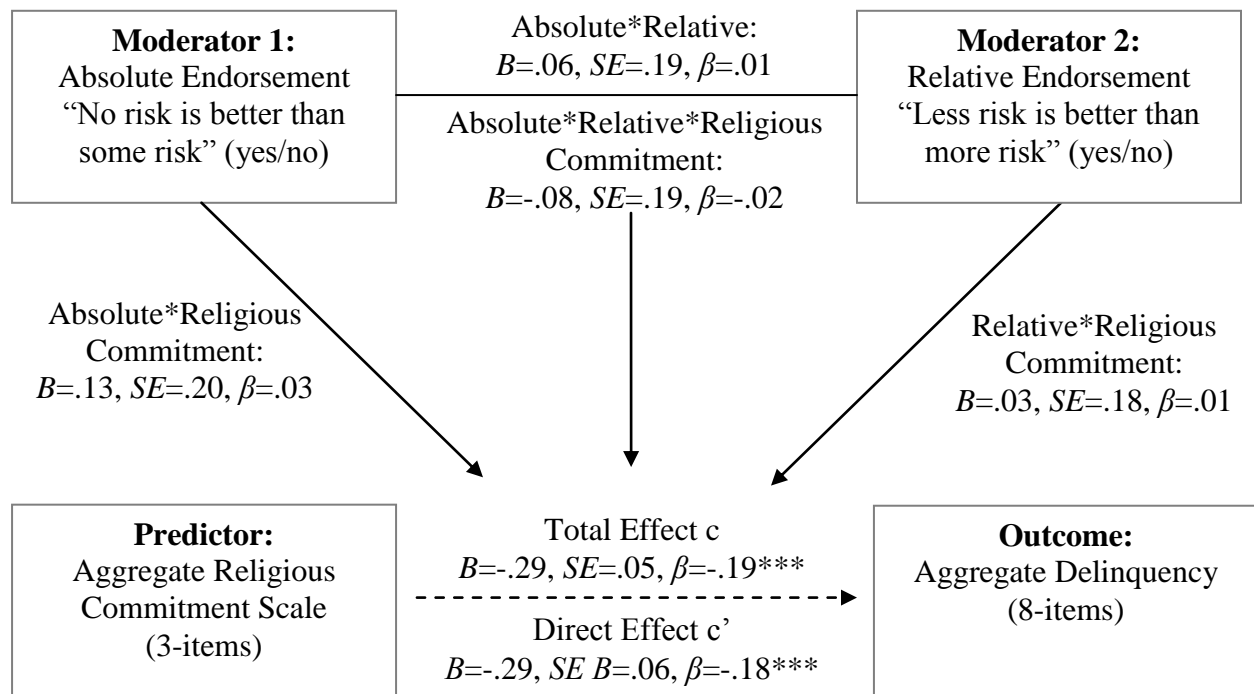
Standardized beta-values were calculated from a worksheet provided online by Herr (October 2, 2006).

APPENDIX J

Moderation

Figure J.1

Moderation (Linear) – Aggregate Religious Commitment and Aggregate Delinquency Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

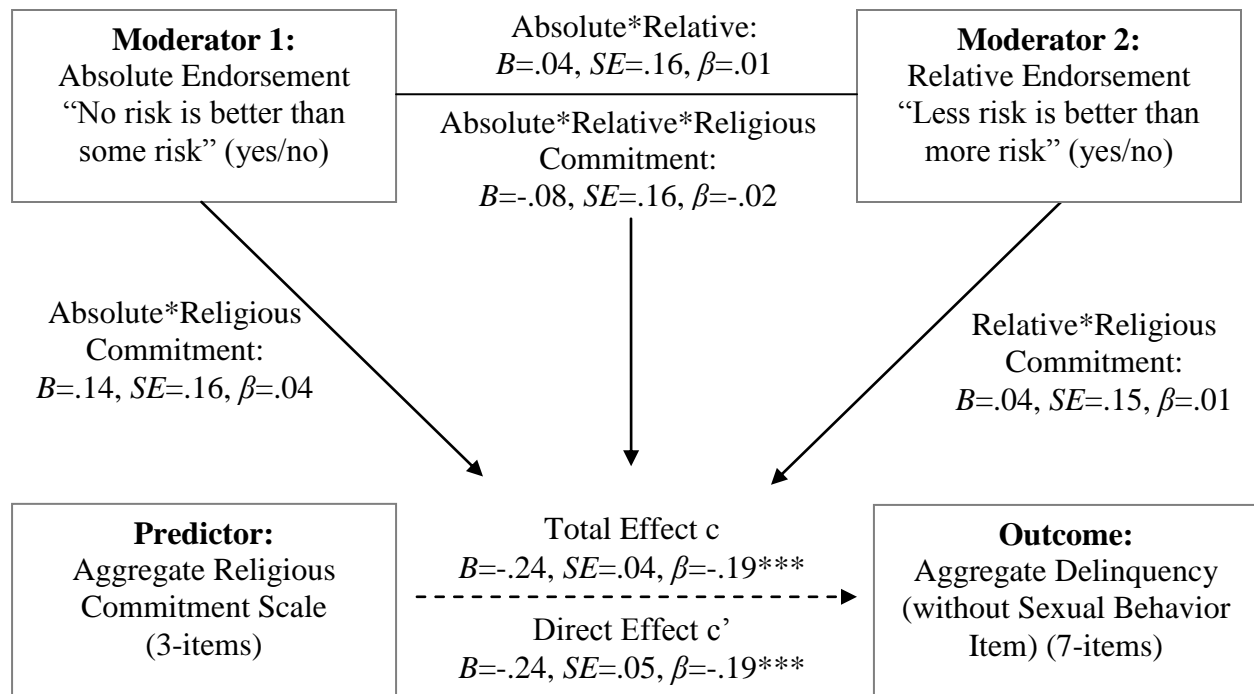
The overall regression: $F(7,799) = 6.45, p < .001; (R^2=.05)$;

Endorsement of the absolute statement on outcome item: $B=-1.06, SE=.45, \beta=-.09, p<.02$;

Endorsement of the relative statement on outcome item: $B=.72, SE=.36, \beta=.07, p<.05$

Figure J.2

Moderation (Linear) – Aggregate Religious Commitment (without Sexual Behavior) and Aggregate Delinquency Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

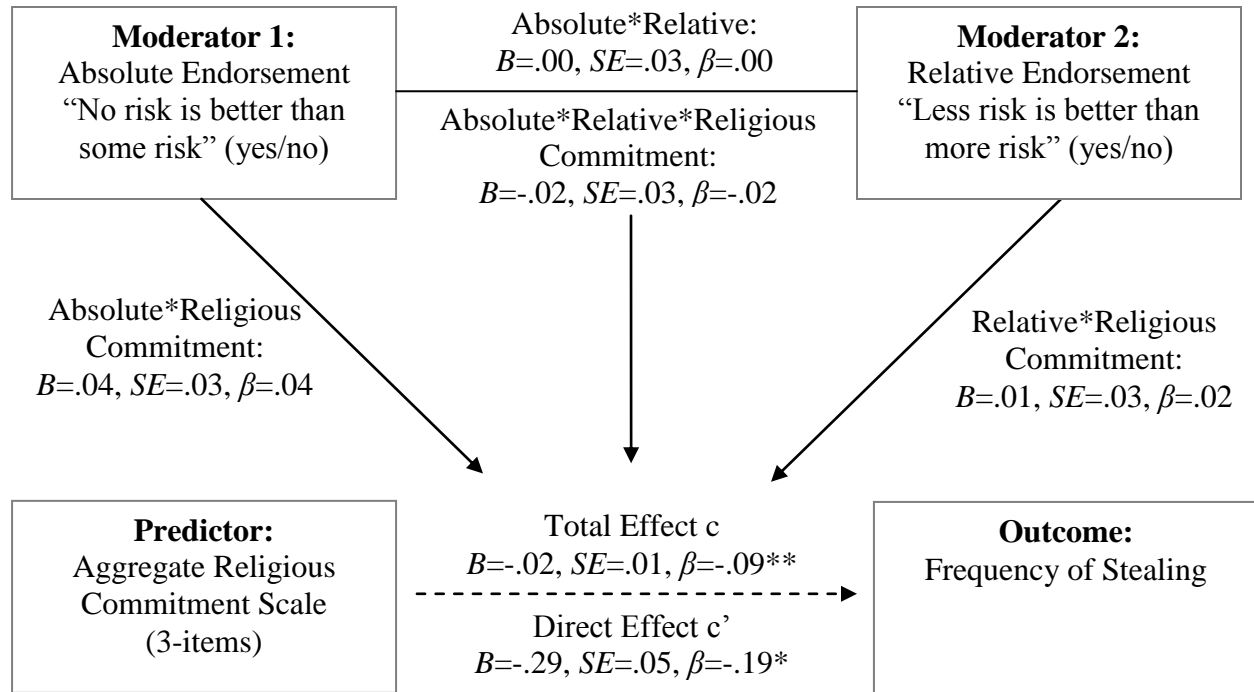
The overall regression: $F(7,799) = 5.83, p < .00; (R^2=.05)$

Endorsement of the absolute statement on outcome item: $B=-.62, SE=.36, \beta=-.07, p<.09$

Endorsement of the relative statement on outcome item: $B=.39, SE=.29, \beta=.05, p<.18$

Figure J.3

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Stealing Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

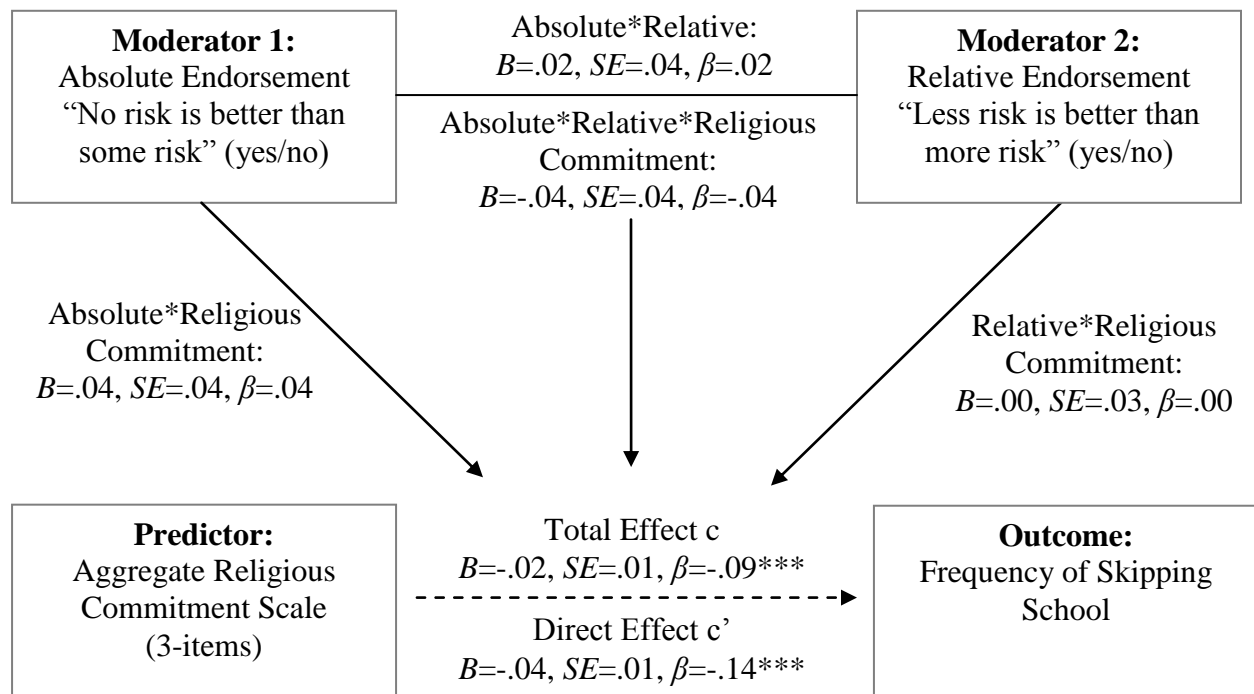
The overall regression: $F(7,799) = 1.78, p < .09; (R^2=.02)$

Endorsement of the absolute statement on outcome item: $B=-.05, SE=.07, \beta=-.03, p < .52$

Endorsement of the relative statement on outcome item: $B=.07, SE=.06, \beta=.05, p < .20$

Figure J.4

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Skipping School Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

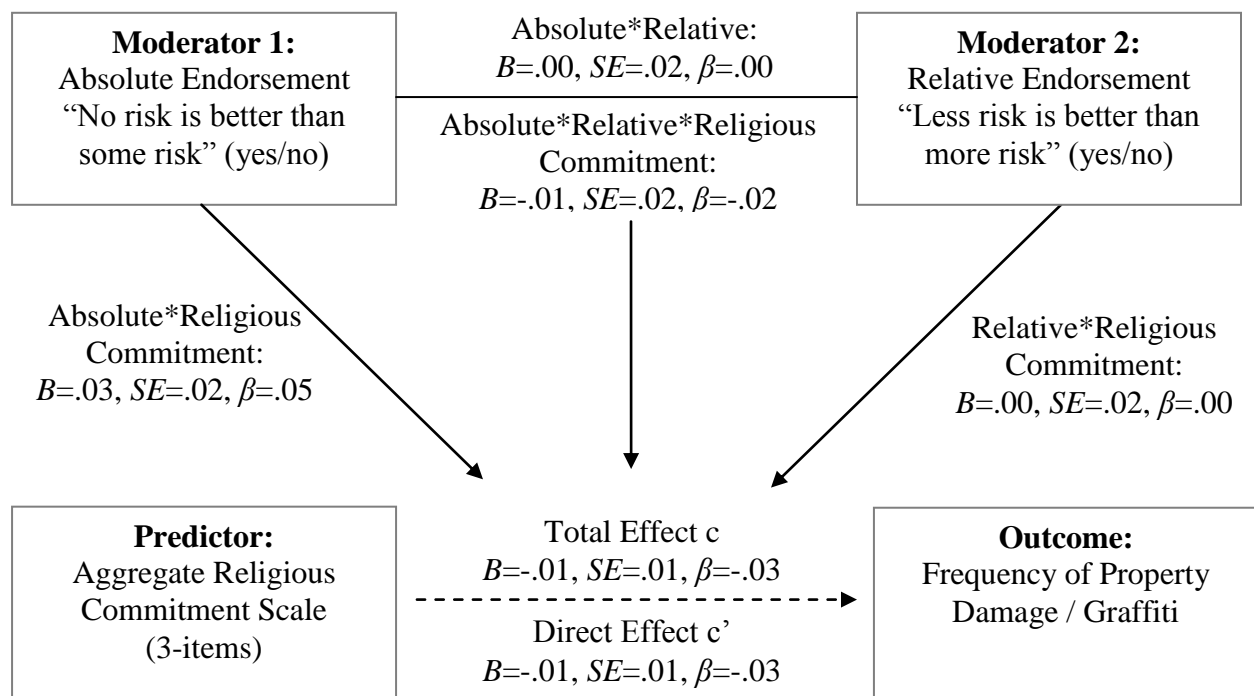
The overall regression: $F(7,799) = 4.38, p < .00; (R^2=.04)$

Endorsement of the absolute statement on outcome item: $B=-.18, SE=.08, \beta=-.08, p < .03$

Endorsement of the relative statement on outcome item: $B=-.05, SE=.07, \beta=-.03, p < .52$

Figure J.5

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Property Damage/Graffiti Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

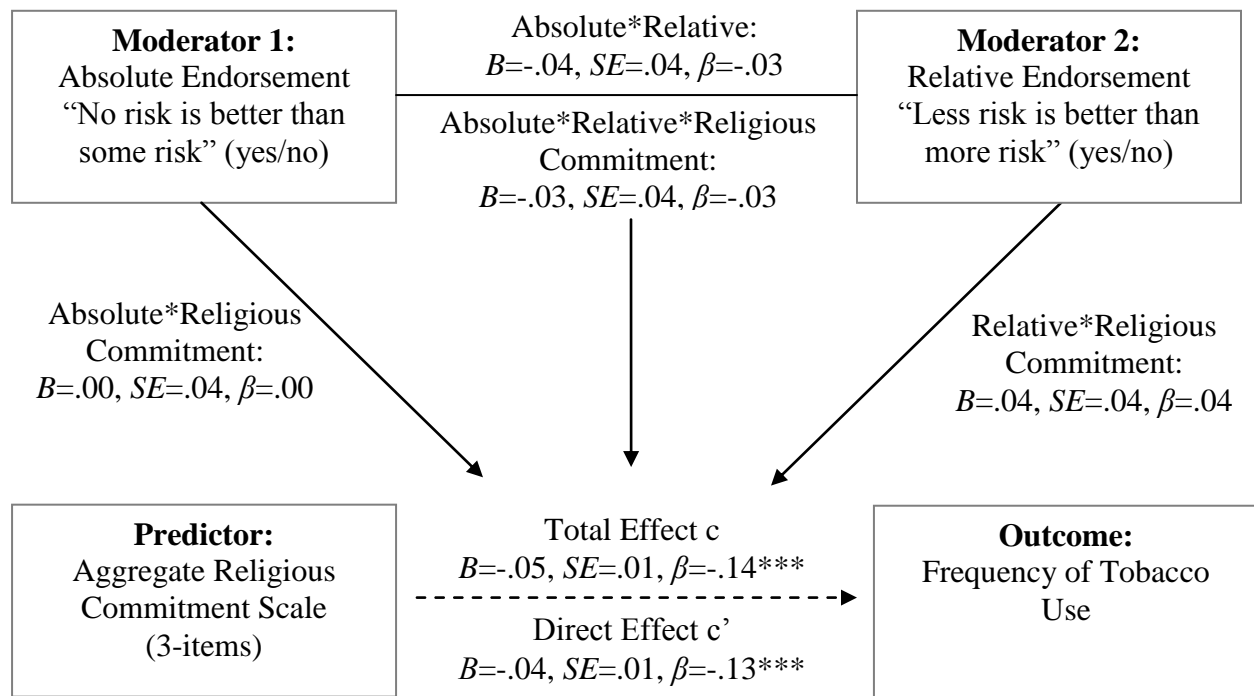
The overall regression: $F(7,799) = .55, p < .80; (R^2=.01)$

Endorsement of the absolute statement on outcome item: $B=-.00, SE=.05, \beta=-.00, p<.97$

Endorsement of the relative statement on outcome item: $B=-.02, SE=.04, \beta=-.02, p<.59$

Figure J.6

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Tobacco Use Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

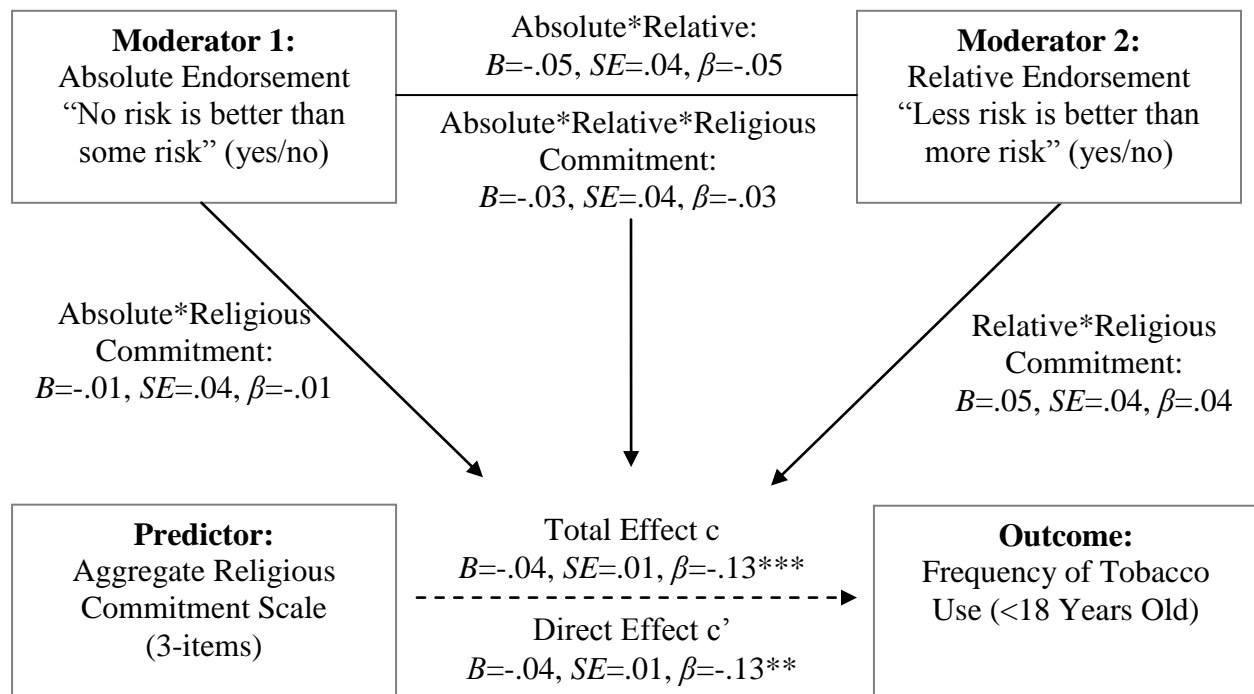
The overall regression: $F(7,799) = 4.06, p < .001; (R^2=.03)$

Endorsement of the absolute statement on outcome item: $B=-.23, SE=.10, \beta=-.10, p < .02$

Endorsement of the relative statement on outcome item: $B=.17, SE=.08, \beta=.08, p < .03$

Figure J.7

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Tobacco Use (<18 years old) Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

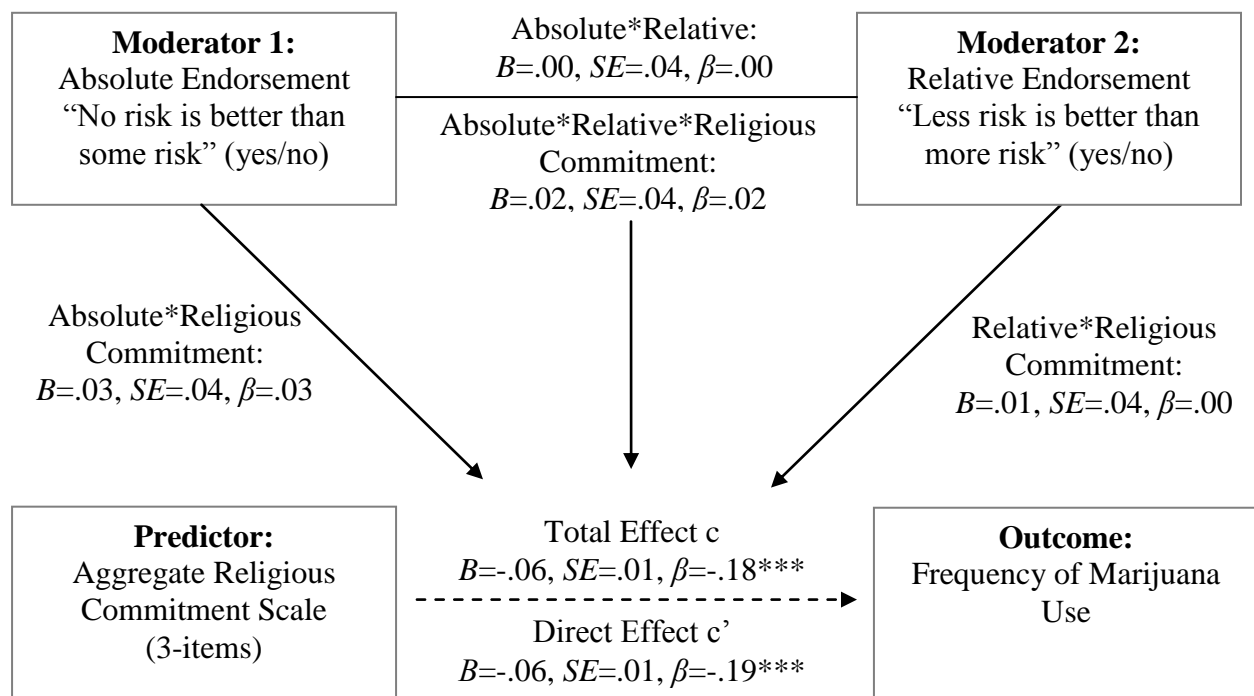
The overall regression: $F(7,783) = 4.10, p < .00; (R^2=.04)$

Endorsement of the absolute statement on outcome item: $B=-.25, SE=.10, \beta=-.10, p < .01$

Endorsement of the relative statement on outcome item: $B=.18, SE=.08, \beta=.09, p < .02$

Figure J.8

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Marijuana Use Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

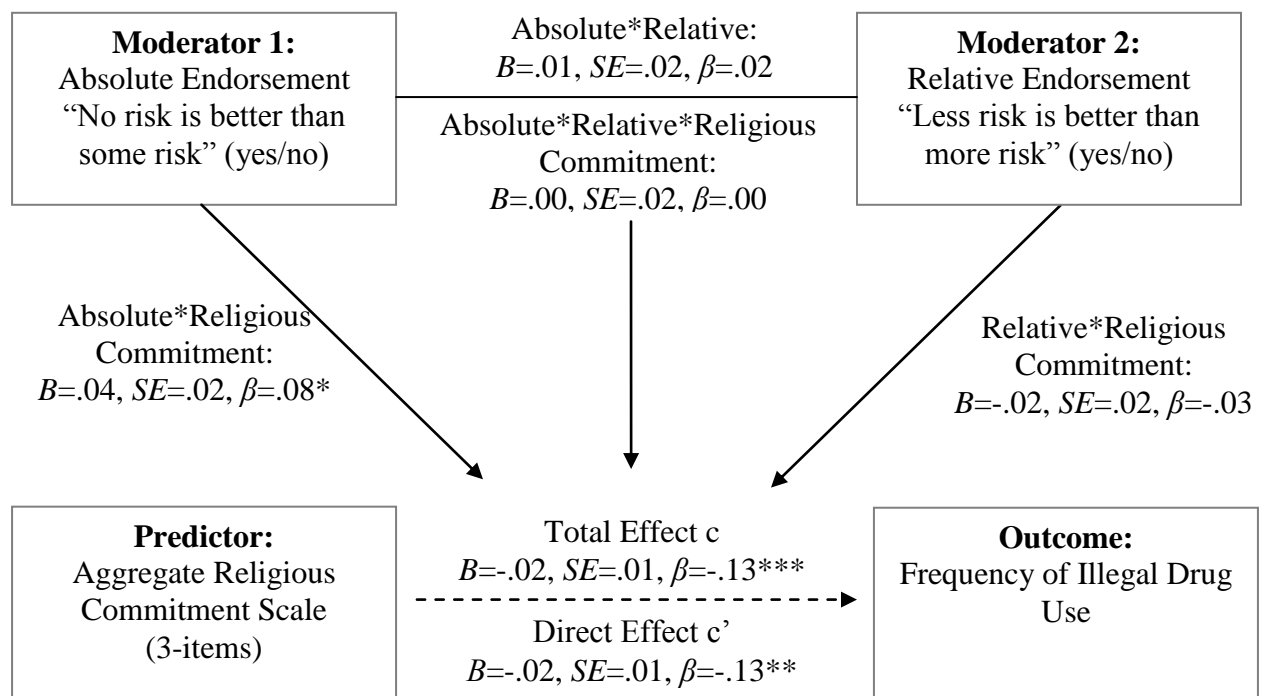
The overall regression: $F(7,799) = 4.93, p < .00; (R^2=.03)$

Endorsement of the absolute statement on outcome item: $B=-.13, SE=.09, \beta=-.06, p < .15$

Endorsement of the relative statement on outcome item: $B=-.01, SE=.07, \beta=-.01, p < .88$

Figure J.9

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Illegal Drug Use Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

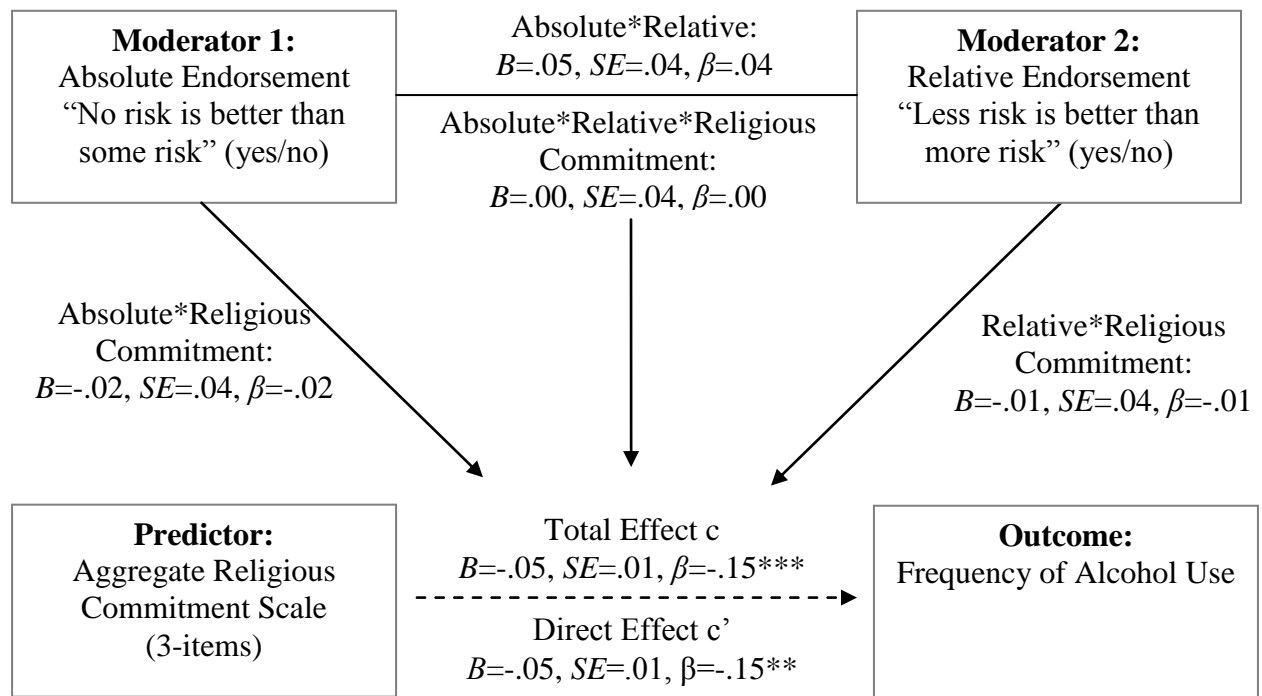
The overall regression: $F(7,799) = 2.82, p < .01; (R^2=.02)$

Endorsement of the absolute statement on outcome item: $B=-.02, SE=.05, \beta=-.01, p<.74$

Endorsement of the relative statement on outcome item: $B=.03, SE=.04, \beta=.02, p<.51$

Figure J.10

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Alcohol Use Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

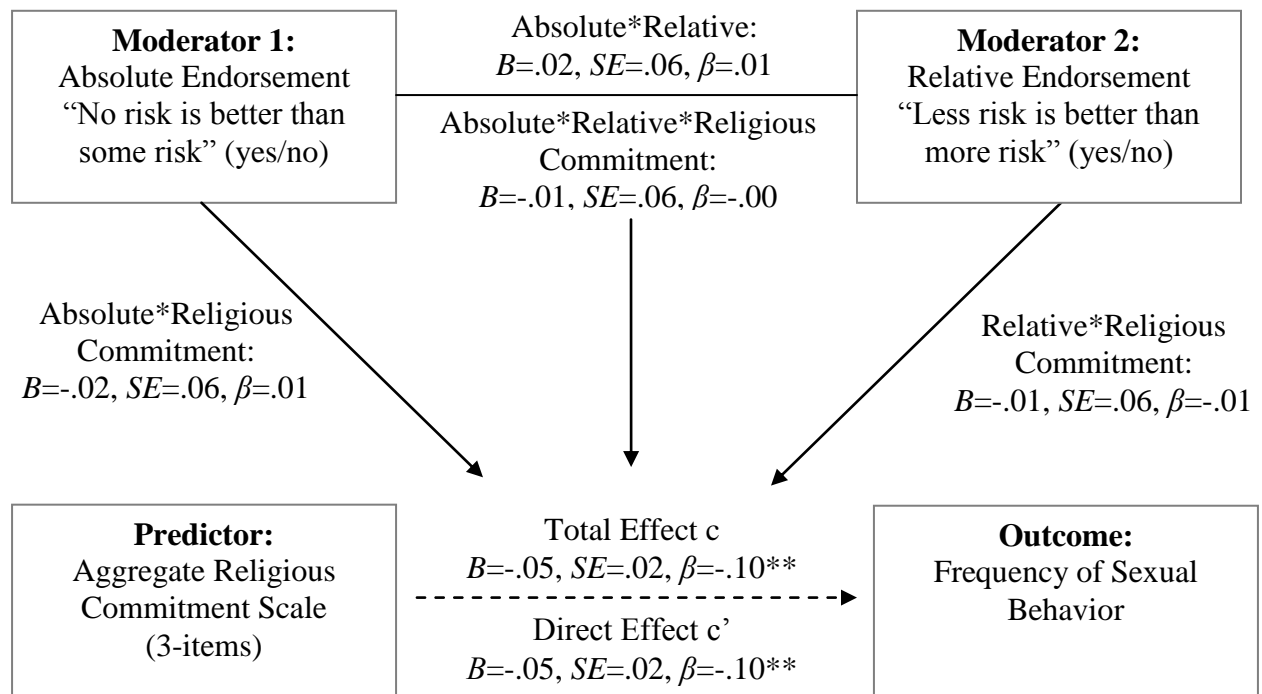
The overall regression: $F(7,799) = 3.45, p < .00; (R^2=.03)$

Endorsement of the absolute statement on outcome item: $B=-.01, SE=.09, \beta=-.01, p<.88$

Endorsement of the relative statement on outcome item: $B=.12, SE=.07, \beta=.06, p<.11$

Figure J.11

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Sexual Behavior Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

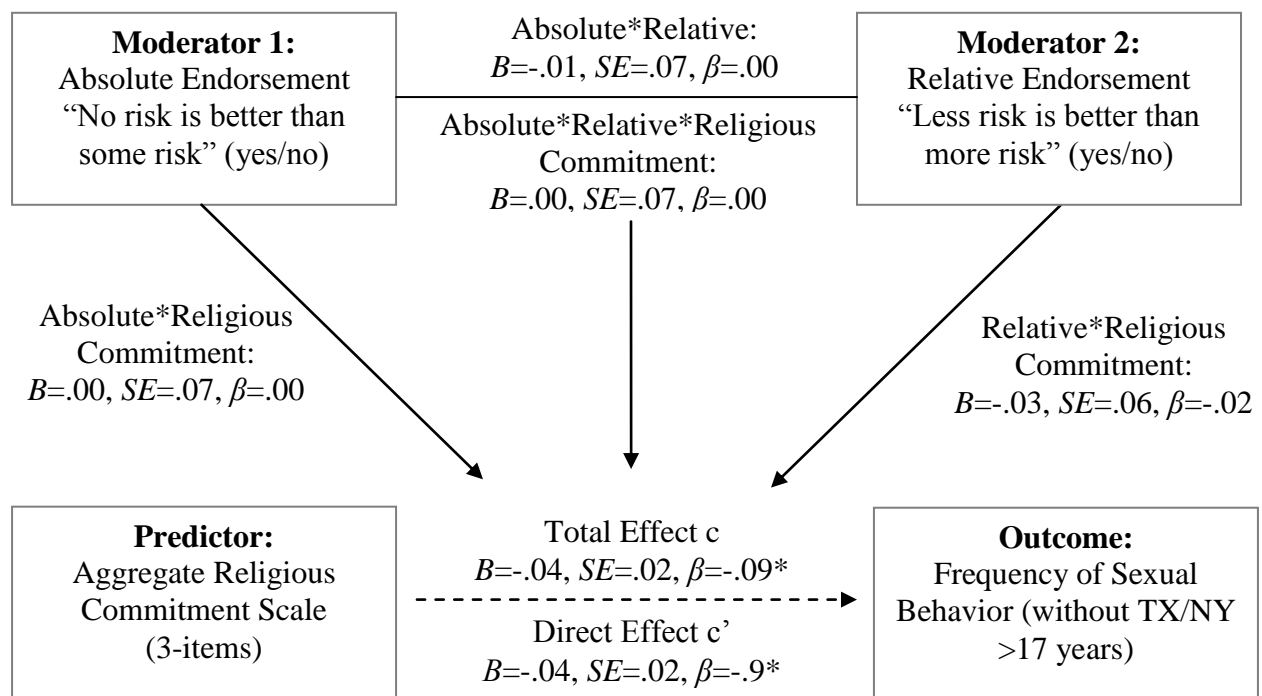
The overall regression: $F(7,799) = 4.20, p < .00; (R^2=.04)$

Endorsement of the absolute statement on outcome item: $B=-.44, SE=.14, \beta=-.12, p < .00$

Endorsement of the relative statement on outcome item: $B=.33, SE=.11, \beta=.11, p < .00$

Figure J.12

Moderation (Linear) – Aggregate Religious Commitment and Frequency of Sexual Behavior (without Texas/New York >17 years old) Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

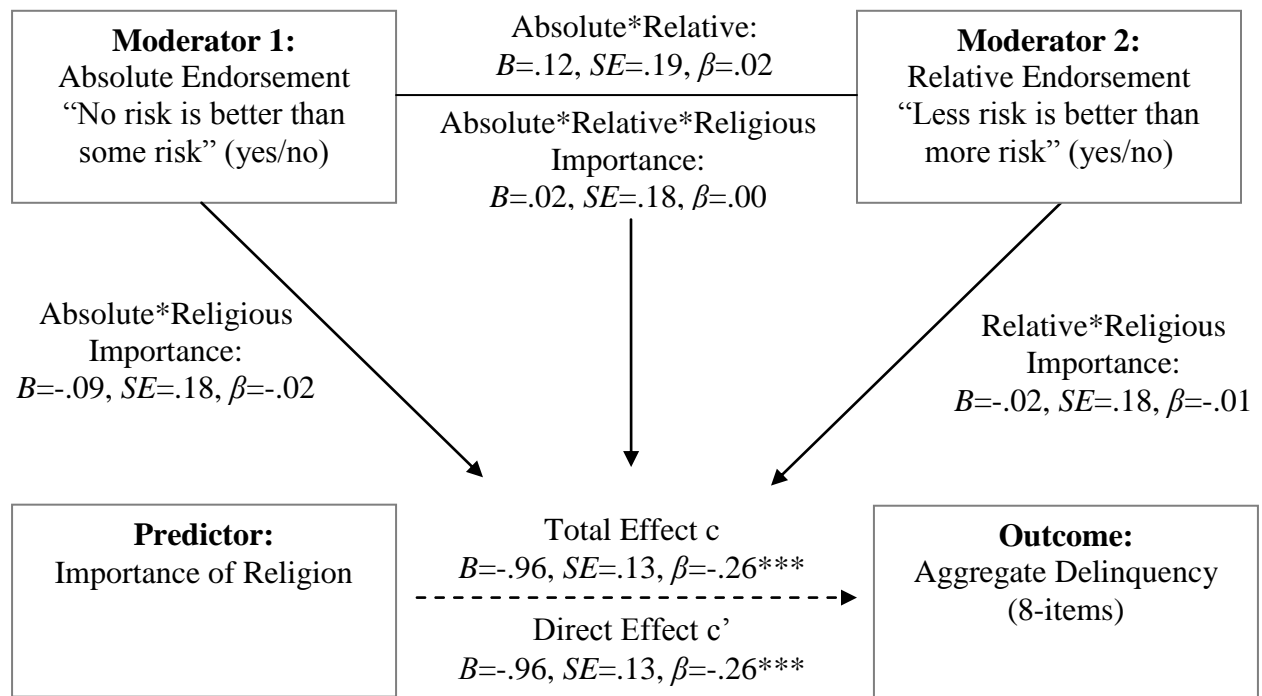
The overall regression: $F(7,799) = 3.02, p < .00; (R^2=.03)$

Endorsement of the absolute statement on outcome item: $B=-.40, SE=.15, \beta=-.11, p < .01$

Endorsement of the relative statement on outcome item: $B=.31, SE=.12, \beta=.10, p < .01$

Figure J.13

Moderation (Linear) – Religious Importance and Aggregate Delinquency Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

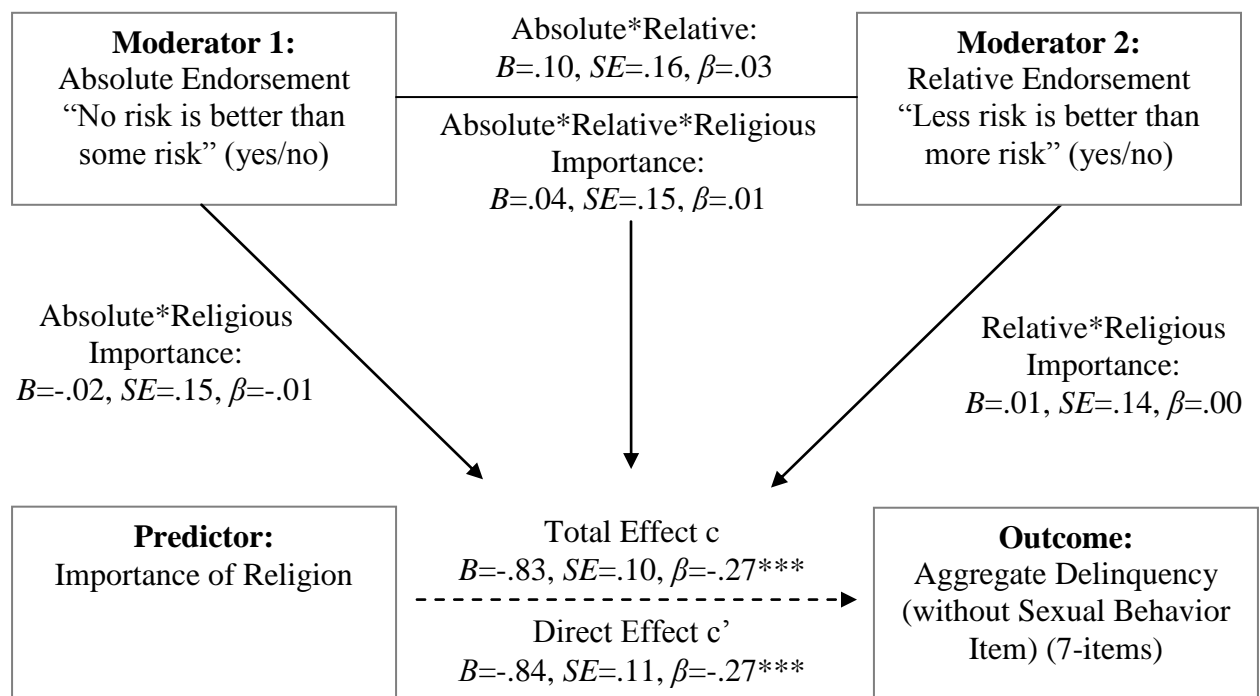
The overall regression: $F(7,799) = 10.34, p < .00; (R^2 = .08)$

Endorsement of the absolute statement on outcome item: $B = -1.04, SE = .44, \beta = -.09, p < .02$

Endorsement of the relative statement on outcome item: $B = .55, SE = .36, \beta = .06, p < .12$

Figure J.14

Moderation (Linear) – Religious Importance and Aggregate Delinquency (without Sexual Behavior) Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

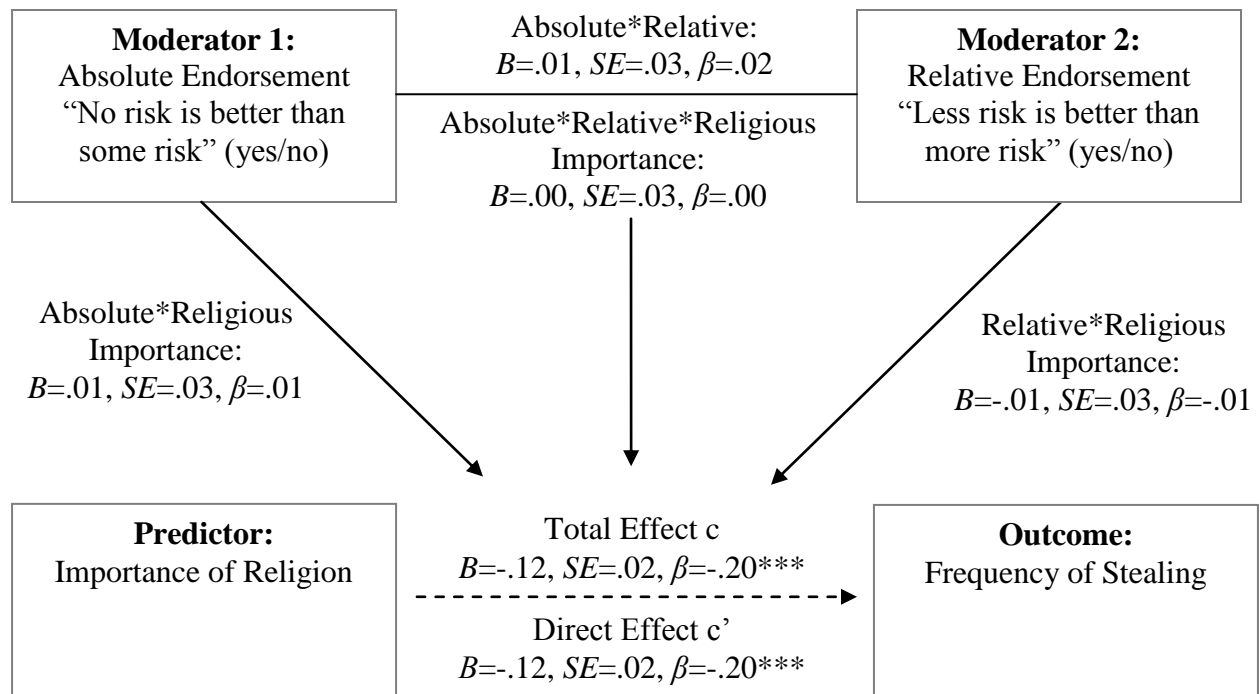
The overall regression: $F(7,799) = 10.45, p < .00; (R^2=.08)$

Endorsement of the absolute statement on outcome item: $B=-.58, SE=.36, \beta=-.06, p < .11$

Endorsement of the relative statement on outcome item: $B=.23, SE=.29, \beta=.03, p < .43$

Figure J.15

Moderation (Linear) – Religious Importance and Frequency of Stealing Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

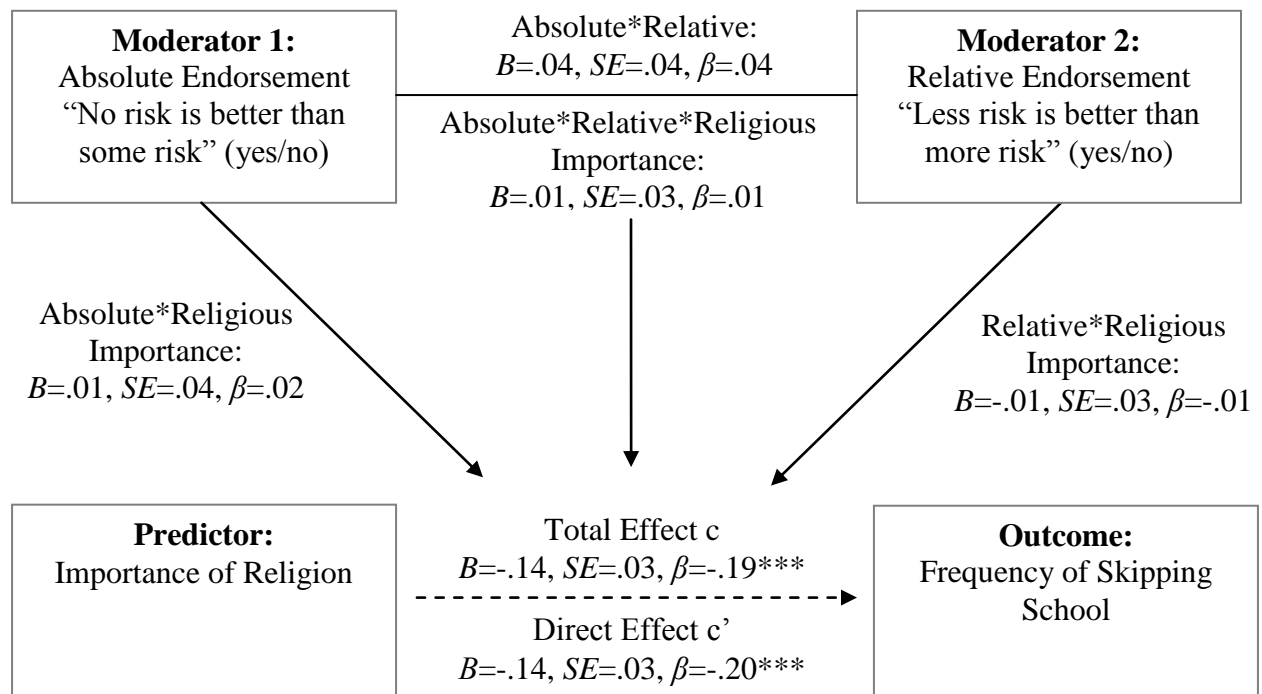
The overall regression: $F(7,799) = 5.01, p < .00; (R^2=.04)$

Endorsement of the absolute statement on outcome item: $B=-.03, SE=.07, \beta=-.2, p<.70$

Endorsement of the relative statement on outcome item: $B=.04, SE=.06, \beta=.03, p<.44$

Figure J.16

Moderation (Linear) – Religious Importance and Frequency of Skipping School Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

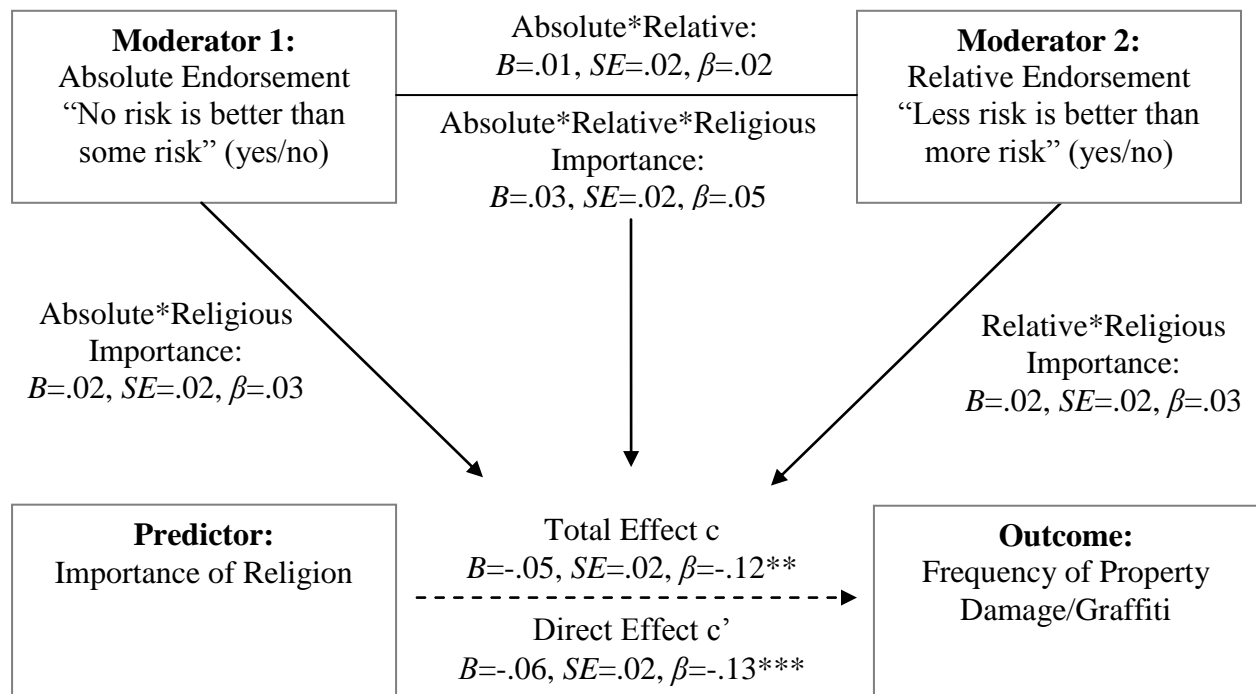
The overall regression: $F(7,799) = 6.07, p < .001; (R^2=.05)$

Endorsement of the absolute statement on outcome item: $B=-.17, SE=.09, \beta=-.08, p < .05$

Endorsement of the relative statement on outcome item: $B=-.02, SE=.07, \beta=-.01, p < .76$

Figure J.17

Moderation (Linear) – Religious Importance and Frequency of Property Damage / Graffiti Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

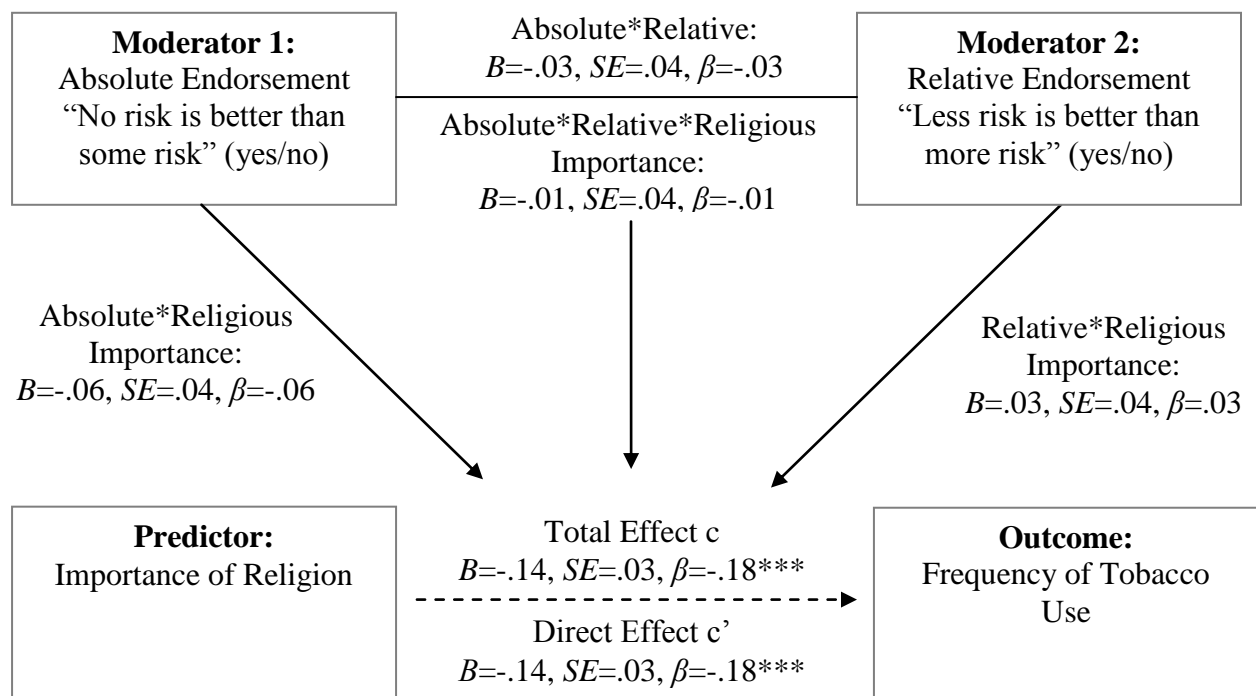
The overall regression: $F(7,799) = 2.14, p < .04; (R^2=.02)$

Endorsement of the absolute statement on outcome item: $B=.03, SE=.05, \beta=.02, p<.63$

Endorsement of the relative statement on outcome item: $B=-.05, SE=.04, \beta=-.05, p<.22$

Figure J.18

Moderation (Linear) – Religious Importance and Frequency of Tobacco Use Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

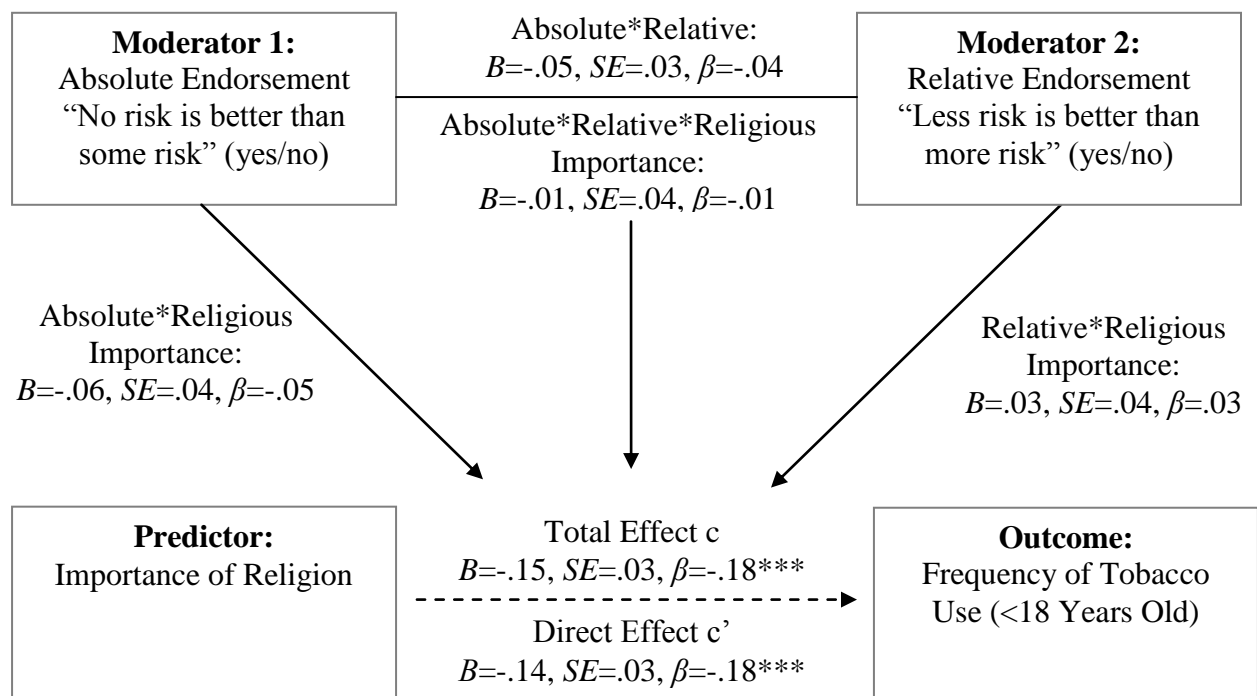
The overall regression: $F(7,799) = 5.86, p < .001; (R^2=.05)$

Endorsement of the absolute statement on outcome item: $B=-.24, SE=.10, \beta=-.10, p < .01$

Endorsement of the relative statement on outcome item: $B=.15, SE=.08, \beta=.07, p < .05$

Figure J.19

Moderation (Linear) – Religious Importance and Frequency of Tobacco Use (< 18 years old) Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

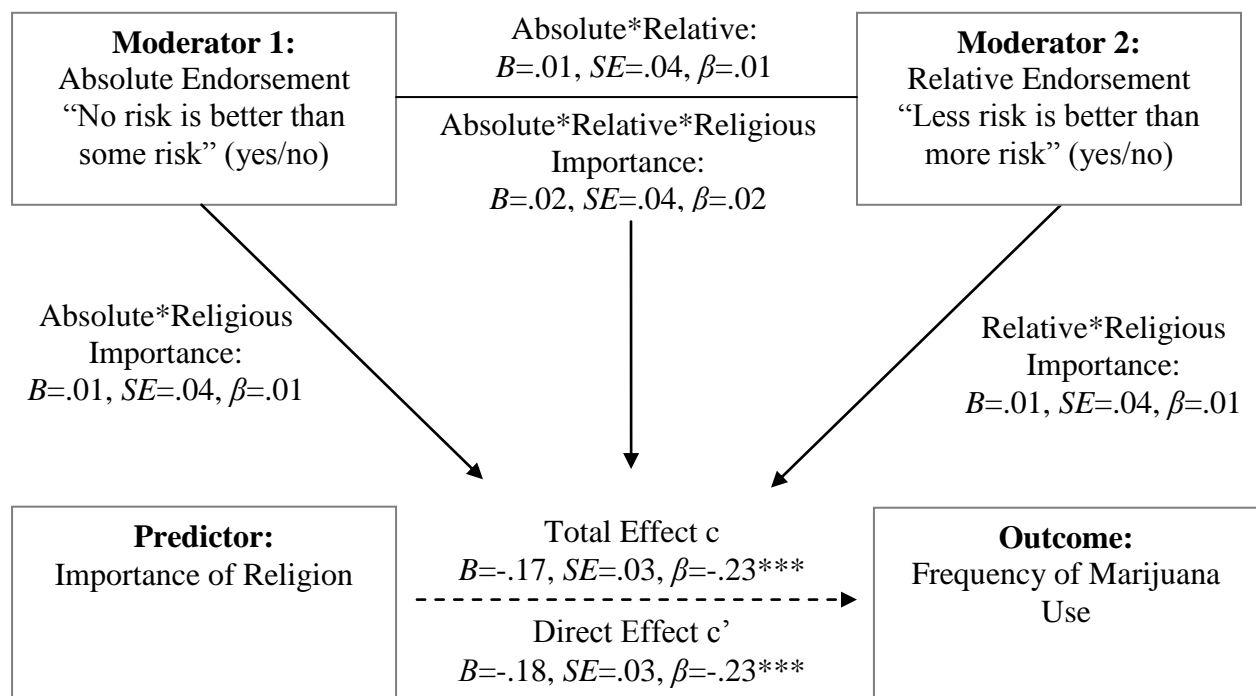
The overall regression: $F(7,783) = 6.02, p < .001; (R^2 = .05)$

Endorsement of the absolute statement on outcome item: $B = -.26, SE = .10, \beta = -.11, p < .01$

Endorsement of the relative statement on outcome item: $B = .16, SE = .08, \beta = .08, p < .04$

Figure J.20

Moderation (Linear) – Religious Importance and Frequency of Marijuana Use Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

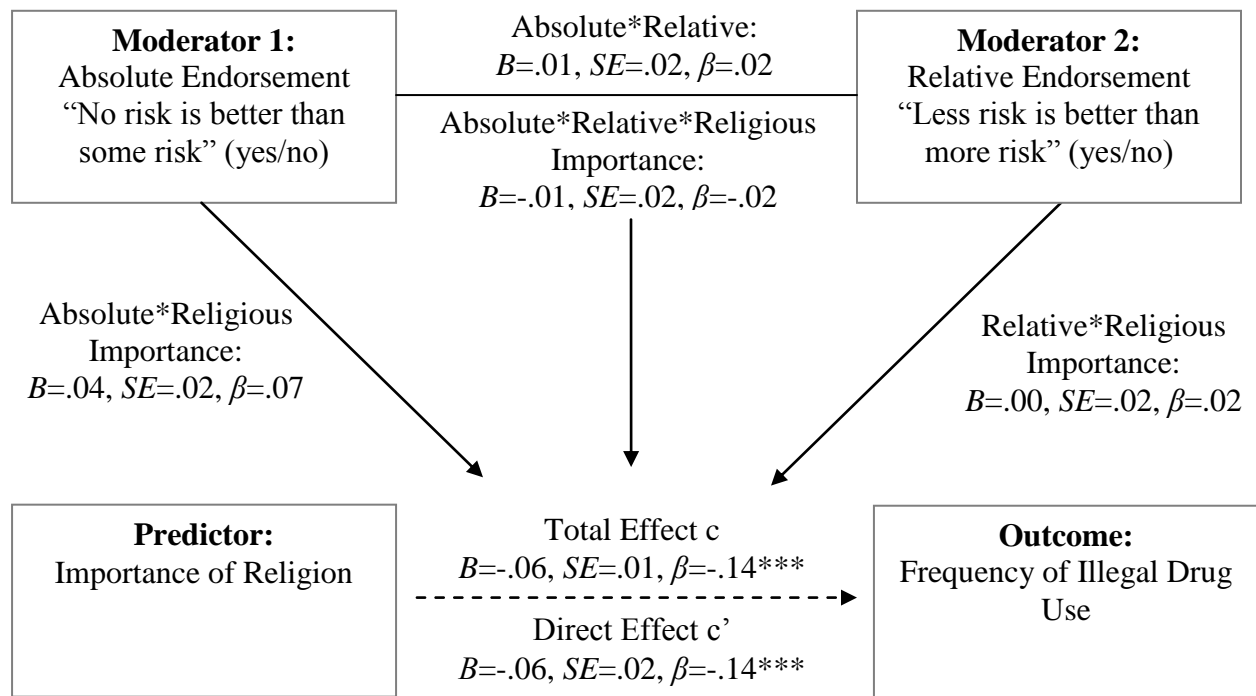
The overall regression: $F(7,799) = 7.08, p < .00; (R^2=.06)$

Endorsement of the absolute statement on outcome item: $B=-.13, SE=.09, \beta=-.06, p < .15$

Endorsement of the relative statement on outcome item: $B=-.01, SE=.07, \beta=-.01, p < .88$

Figure J.21

Moderation (Linear) – Religious Importance and Frequency of Illegal Drug Use Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

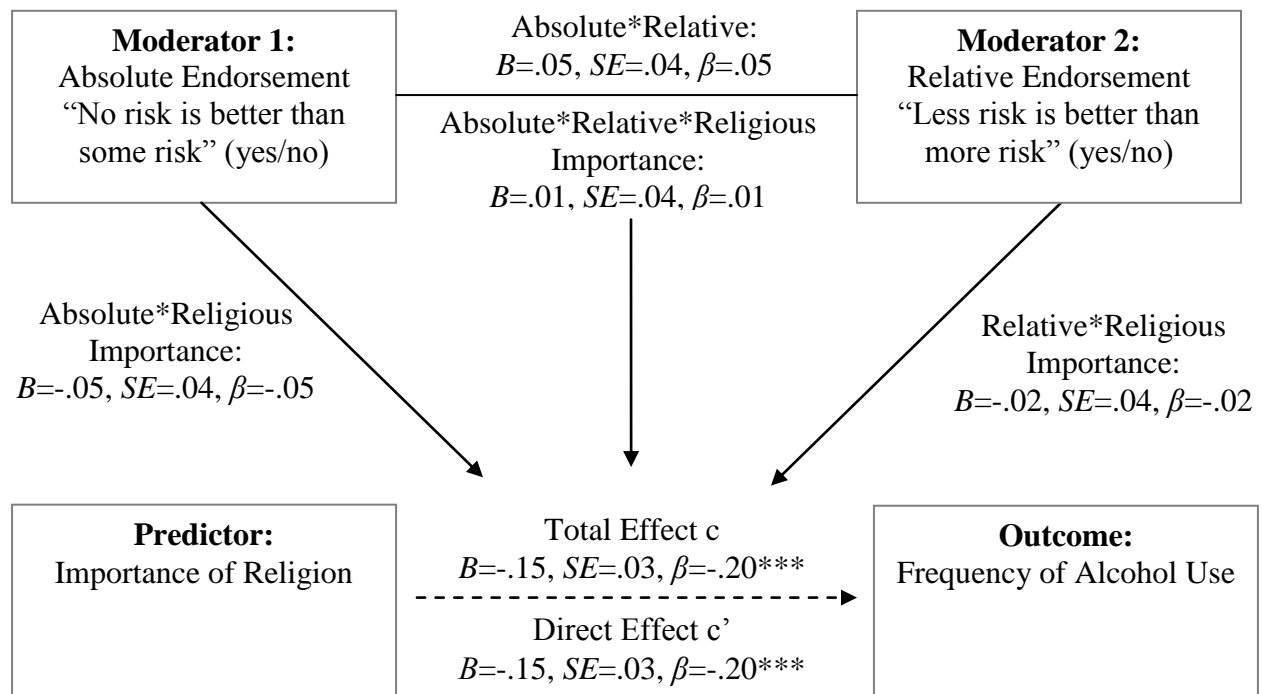
The overall regression: $F(7,799) = 3.38, p < .00; (R^2=.03)$

Endorsement of the absolute statement on outcome item: $B=-.02, SE=.05, \beta=-.02, p<.64$

Endorsement of the relative statement on outcome item: $B=.02, SE=.04, \beta=.02, p<.63$

Figure J.22

Moderation (Linear) – Religious Importance and Frequency of Alcohol Use Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

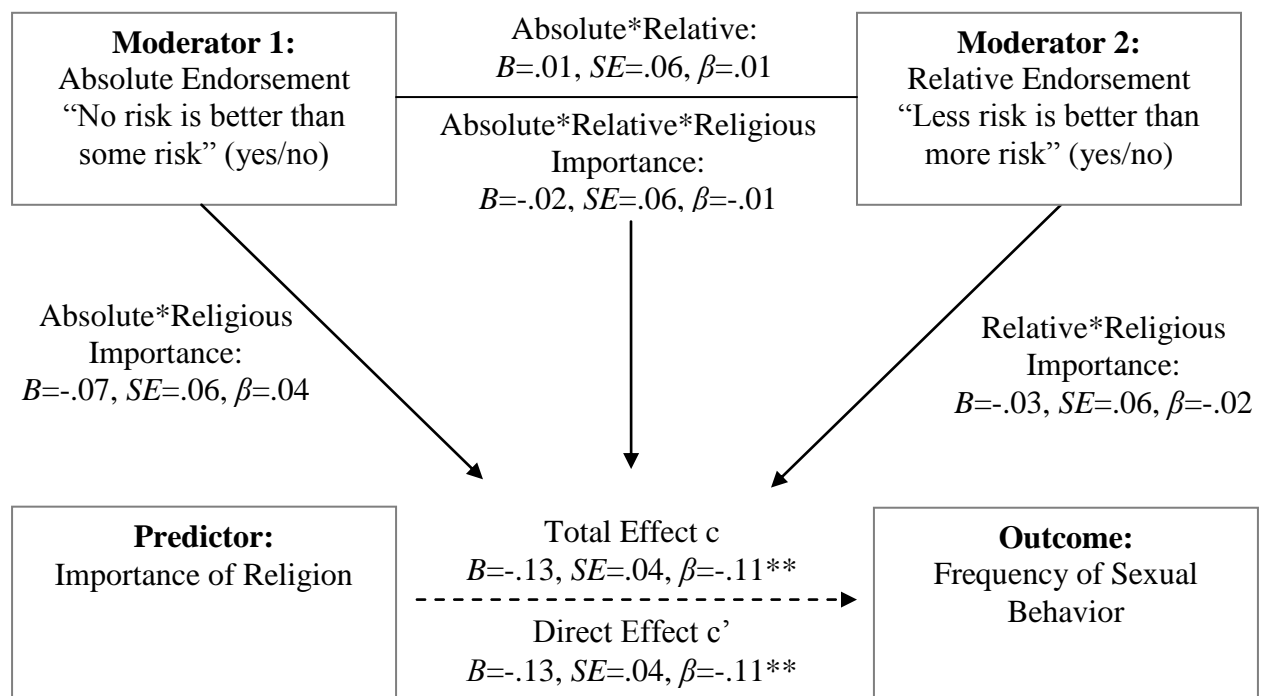
The overall regression: $F(7,799) = 5.98, p < .001; (R^2 = .05)$

Endorsement of the absolute statement on outcome item: $B = -.01, SE = .09, \beta = .00, p < .93$

Endorsement of the relative statement on outcome item: $B = .10, SE = .07, \beta = .05, p < .17$

Figure J.23

Moderation (Linear) – Religious Importance and Frequency of Sexual Behavior Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

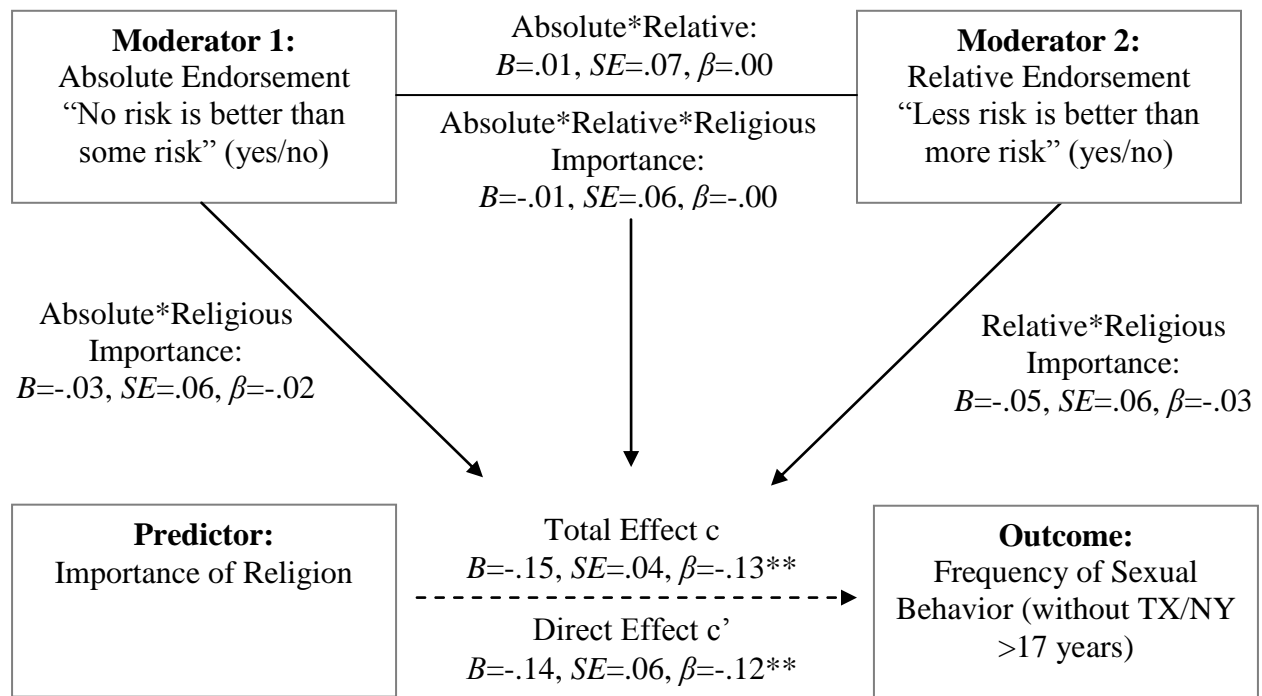
The overall regression: $F(7,799) = 4.75, p < .00; (R^2=.04)$

Endorsement of the absolute statement on outcome item: $B=-.47, SE=.14, \beta=-.13, p < .00$

Endorsement of the relative statement on outcome item: $B=.32, SE=.11, \beta=.10, p < .01$

Figure J.24

Moderation (Linear) – Religious Importance and of Sexual Behavior (without Texas/New York >17 years old) Moderated by Absolute and Relative Endorsement



Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$;

The overall regression: $F(7,799) = 3.90, p < .00; (R^2=.04)$

Endorsement of the absolute statement on outcome item: $B=-.41, SE=.15, \beta=-.12, p < .01$

Endorsement of the relative statement on outcome item: $B=.30, SE=.12, \beta=.10, p < .01$